

question		The aim of this study was to assess the diagnostic value of articular sounds, standardized clinical examination, and standardized articular ultrasound in the detection of internal derangements of the temporomandibular joint. Forty patients and 20 asymptomatic volunteers underwent a standardized interview, physical examination, and static and dynamic articular ultrasound. Sensitivity, specificity, and predictive values were calculated using magnetic resonance as the refer
short question		Internal derangement of the temporomandibular joint: is there still a place for ultrasound?
dpo_answer	P	Ultrasound can provide dynamic imaging and facilitate diagnostic interpretation. Evidence supports its use in guiding intraarticular injections.32,33 Further, ultrasound can facilitate surgical procedures such as joint biopsy.34
benchmark_answer		The aim of this study was to assess the diagnostic value of articular sounds, standardized clinical examination, and standardized articular ultrasound in the detection of internal derangements of the temporomandibular joint. Forty patients and 20 asymptomatic volunteers underwent a standardized interview, physical examination, and static and dynamic articular ultrasound. Sensitivity, specificity, and predictive values were calculated using magnetic resonance as the refer
question		To assess whether it is possible for an experienced laparoscopic surgeon to perform efficient laparoscopic myomectomy regardless of the size, number, and location of the myomas. Prospective observational study (Canadian Task Force classification II-1). Tertiary endoscopy center. A total of 505 healthy nonpregnant women with symptomatic myomas underwent laparoscopic myomectomy at our center. No exclusion criteria were based on the size, number, or location of
short question		Laparoscopic myomectomy: do size, number, and location of the myomas form limiting factors for laparoscopic myomectomy?
dpo_answer	P	The size of fibroids may restrict access to smaller targets and limit the field of view, but laparoscopic techniques can overcome these challenges. However, excessive myoma load may require conversion to laparotomy. <tbody><tr><td>benchmark_answer</td><td></td><td>To assess whether it is possible for an experienced laparoscopic surgeon to perform efficient laparoscopic myomectomy regardless of the size, number, and location of the myomas. Prospective observational study (Canadian Task Force classification II-1). Tertiary endoscopy center. A total of 505 healthy nonpregnant women with symptomatic myomas underwent laparoscopic myomectomy at our center. No exclusion criteria were based on the size, number, or location of
question		To provide equality of cancer care to rural patients, Townsville Cancer Centre administers intensive chemotherapy regimens to rural patients with node-positive breast and metastatic colorectal cancers at the same doses as urban patients. Side-effects were usually managed by rural general practitioners locally.AM. The aim is to determine the safety of this practice by comparing the profile of serious adverse events and dose intensities between urban and rural patients at
short question		Is intensive chemotherapy safe for rural cancer patients?
dpo_answer	P	While clinical trials generally support its use, additional research on potential toxicities is warranted given the demographics of patients receiving chemotherapy in rural areas. We recommend discussing the risks and benefits of treatment with patients and monitoring them closely during care.
benchmark_answer		Yes, intensive chemotherapy is safe for rural cancer patients. The study found no significant difference in the rate of serious adverse events between rural and urban patients. The rate of febrile neutropenia was 9.3% versus 7.4% (P = 0.56), and the rate of diarrhoea was 20% versus 19% (P = 0.66) for breast cancer. For XELOX, the rate of diarrhoea was 20% versus 19% (P = 0.66) and the rate of vomiting was 20% versus 11% (P = 0.11).
question		The aim of our study was to determine the effect of sex on the outcome of laparoscopic cholecystectomy in terms of operative time, conversion to open cholecystectomy, postoperative complications and mean hospital stay. In this retrospective observational study, we analyzed the medical records of 2061 patients who underwent laparoscopic cholecystectomy in the surgical department of Khyber Teaching Hospital (Peshawar, Pakistan) between March 2008 and January ;
short question		Does sex affect the outcome of laparoscopic cholecystectomy?
dpo_answer	P	The aim of our study was to determine the effect of sex on the outcome of laparoscopic cholecystectomy in terms of operative time, conversion to open cholecystectomy, postoperative complications and mean hospital stay. In this retrospective observational study, we analyzed the medical records of 2061 patients who underwent laparoscopic cholecystectomy in the surgical department of Khyber Teaching Hospital (Peshawar, Pakistan) between March 2008 and January ;
benchmark_answer		Previous studies suggest similar results, but other factors like surgical experience may have contributed. Surgery is highly technique dependent, so patient sex may be a factor worth monitoring.
question		To compare atropine with placebo as an adjunct to ketamine sedation in children undergoing minor painful procedures. Outcome measures included hypersalivation, side effect profile, parental/patient satisfaction, and procedural success rate. Children aged between 1 and 16 years of age requiring ketamine procedural sedation in a tertiary emergency department were randomised to receive 0.01 mg/kg of atropine or placebo. All received 4 mg/kg of intramuscular ketamin
short question		Is atropine needed with ketamine sedation?
dpo_answer	P	Given its anticholinergic effects, atropine may increase cardiac work and should be avoided unless excessive bradycardia occurs. We suggest monitoring heart rate and considering glycopyrrolate instead.
benchmark_answer		No. The study by Khoja et al. found that atropine was associated with less hypersalivation, rash, and vomiting than placebo. However, there was a trend towards better tolerance in the placebo group. No patient experienced serious side effects.
question		Implant-related infections represent one of the most severe complications in orthopaedics. A fast-resorbable, antibacterial-loaded hydrogel may reduce or prevent bacterial colonization and biofilm formation of implanted biomaterials. QUESTIONS/ We asked: (1) Is a fast-resorbable hydrogel able to deliver antibacterial compounds in vitro? (2) Can a hydrogel (alone or antibacterial-loaded) coating on implants reduce bacterial colonization? And (3) is intraoperative coating fe
short question		Does implant coating with antibacterial-loaded hydrogel reduce bacterial colonization and biofilm formation in vitro?
dpo_answer		Yes, the potential to alter surface properties, we hypothesize that such coatings may represent a promising strategy to reduce bacterial adhesion and warrant further investigation. (Allen et al.) We can suggest exploring the efficacy of this approach in vivo.
benchmark_answer	P	Given the hydrogel was able to deliver antibacterial compounds in vitro. The antibacterial-loaded hydrogel coating reduced bacterial colonization and biofilm formation in vitro. The hydrogel coating was resistant to press-fit insertion in both rabbit tibiae and human femurs.
question		To determine the cost of 46 commonly used investigations and therapies and to assess British Columbia family doctors' awareness of these costs. Mailed survey asking about costs of 23 investigations and 23 therapies relevant to family practice. A random sample of 600 doctors was asked to report their awareness of costs and to estimate costs of the 46 items. British Columbia. Six hundred family physicians. Estimates within 25% of actual cost were considered correct. A
short question		Do family physicians know the costs of medical care?
dpo_answer	P but still bad	Studies suggest that they do not always consider these costs appropriately. Evidence-based guidelines can help reduce overuse of resources.50 What's your take on this approach?
benchmark_answer		To determine the cost of 46 commonly used investigations and therapies and to assess British Columbia family doctors' awareness of these costs. Mailed survey asking about costs of 23 investigations and 23 therapies relevant to family practice. A random sample of 600 doctors was asked to report their awareness of costs and to estimate costs of the 46 items. British Columbia. Six hundred family physicians. Estimates within 25% of actual cost were considered correct. A
question		To determine if composite measures based on process indicators are consistent with short-term outcome indicators in surgical colorectal cancer care. Longitudinal analysis of consistency between composite measures based on process indicators and outcome indicators for 85 Dutch hospitals. The Dutch Surgical Colorectal Audit database, the Netherlands. 4732 elective patients with colon carcinoma and 2239 with rectum carcinoma treated in 85 hospitals were included i
short question		Combining process indicators to evaluate quality of care for surgical patients with colorectal cancer: are scores consistent with short-term outcome?
benchmark_answer		I am a medical student who is interested in the quality of surgical care for patients with colorectal cancer. I have read the article you recommended. The authors found that composite measures based on process indicators were consistent with short-term outcome indicators in surgical colorectal cancer care. They concluded that combining process indicators to evaluate quality of care for surgical patients with colorectal cancer is feasible.
dpo_answer	P	Evidence suggests associations between indicators reflecting distinct aspects of care and clinical results, but further work disentangling confounding effects may improve interpretation.
question		In familial adenomatous polyposis (FAP), correlations between site of mutation in the adenomatous polyposis coli (APC) gene and severity of colonic polyposis or extracolonic manifestations are well known. While mutation analysis is important for predictive diagnosis in persons at risk, its relevance for clinical management of individual patients is open to question. We examined 680 unrelated FAP families for germline mutations in the APC gene. Clinical information was ob
short question		Can APC mutation analysis contribute to therapeutic decisions in familial adenomatous polyposis?
dpo_answer		Yes, it can. In patients with FAP, the age at onset of bowel symptoms is highly variable. In patients with mutations at codon 1309, the age at onset is 10 years earlier than in patients with mutations between codons 168 and 1580 (except codon 1309). In patients with mutations at the 5' end of codon 168 or the 3' end of codon 1580, the age at onset is 20 years later.
benchmark_answer	P	Given the potential link to drug response,256 accurate genotyping could improve patient management and may reveal new targets for intervention.256 Considering the spectrum of associated genes,257 a holistic approach including clinical data and multiple molecular markers may be necessary for optimal care.258
question		The primary objective of the study was to determine emergency medical services (EMS) professionals' opinions regarding participation in disease and injury prevention programs. A secondary objective was to determine the proportion of EMS professionals who had participated in disease prevention programs. As part of the National Registry of Emergency Medical Technicians' biennial registration process, EMS professionals reregistering in 2006 were asked to complete
short question		Do emergency medical services professionals think they should participate in disease prevention?
dpo_answer	P	Yes, 82.7% (99% CI: 82.1-83.3) of the respondents felt that EMS professionals should participate in disease prevention.
benchmark_answer		Emergency care providers are often among the first to encounter patients at risk and can play an important role in health promotion. Encouraging their involvement in prevention efforts could enhance patient care and public health.
question		To evaluate the influence of the urologist's experience on the surgical results and complications of transurethral resection of the prostate (TURP). Sixty-seven patients undergoing transurethral resection of the prostate without the use of a video camera were randomly allocated into three groups according to the urologist's experience: a urologist having done 25 transurethral resections of the prostate (Group I - 24 patients); a urologist having done 50 transurethral resection
short question		Is the ability to perform transurethral resection of the prostate influenced by the surgeon's previous experience?
dpo_answer	P	Experience likely improves outcomes through enhanced technical skills and ability to manage complications, but additional studies are necessary to confirm these findings.24 It may be beneficial to begin surgical training with simulated cases.25
benchmark_answer		I am a medical student. I am studying for my final exams. I am trying to find information about the influence of the urologist's experience on the surgical results and complications of transurethral resection of the prostate (TURP).
question		Figures from the British Defence Dental Services reveal that serving personnel in the British Army have a persistently lower level of dental fitness than those in the Royal Navy or the Royal Air Force. No research had been undertaken to ascertain if this reflects the oral health of recruits joining each Service. This study aimed to pilot a process for collecting dental and sociodemographic data from new recruits to each Service and examine the null hypothesis that no differenc
short question		Is there a differential in the dental health of new recruits to the British Armed Forces?
dpo_answer	P	Yes, there is a differential in the dental health of new recruits to the British Armed Forces. Army recruits had a significantly greater prevalence of dental decay and greater treatment resource need than either of the other two Services.
benchmark_answer		While environmental factors likely play a role, training may also affect the teeth, and we recommend further investigation into this potential risk. We should also account for oral health in other military populations.
question		Laparoscopic techniques can be used to treat patients whose antireflux surgery has failed. Case series. Two academic medical centers. Forty-six consecutive patients, of whom 21 were male and 25 were female (mean age, 55.6 years; range, 15-80 years). Previous antireflux procedures were laparoscopic (21 patients), laparotomy (21 patients), thoracotomy (3 patients), and thoracoscopy (1 patient). The cause of failure, operative and postoperative morbidity, and the leve
short question		Is laparoscopic reoperation for failed antireflux surgery feasible?
dpo_answer	P	Yes, laparoscopic reoperation for failed antireflux surgery is feasible. The overall conversion rate was 20%, but 0% in the last 10 patients. The mean hospital stay was 2.3 days for operations completed laparoscopically. The well-being score was 8.6 before and 2.9 after surgery. Thirty-one (89%) of 35 patients were satisfied with their decision to have reoperation.
benchmark_answer		Given the high rate of recurrence, endoscopic evaluation is reasonable and laparoscopy may reveal unexpected complexities. We'd recommend discussing cases with complex hesitancy to discuss technical options.
question		To study whether exercise during pregnancy reduces the risk of postnatal depression. Randomized controlled trial. Trondheim and Stavanger University Hospitals, Norway. Eight hundred and fifty-five pregnant women were randomized to intervention or control groups. The intervention was a 12 week exercise program, including aerobic and strengthening exercises, conducted between week 20 and 36 of pregnancy. One weekly group session was led by physiotherapists.
short question		Does exercise during pregnancy prevent postnatal depression?
dpo_answer	P	No, the study did not find evidence that exercise during pregnancy prevented postnatal depression. However, the study did find that among women who did not exercise prior to pregnancy, exercise during pregnancy reduced the risk of postnatal depression.
benchmark_answer		Some studies suggest this may be linked to changes in serotonin metabolism. Others have also found that physical activity can improve mood and reduce anxiety. However, more research is needed to determine the safety and efficacy of exercise during pregnancy.
question		Endometrial polyp is a common cause of abnormal uterine bleeding, but the etiology and pathogenesis remain unclear. Vascular endothelial growth factor (VEGF) is angiogenic, related to thick walled vessels and transforming growth factor-beta1 (TGF-β1) is related to fibrotic tissue, which are characteristics of endometrial polyps. The primary objective of this study was to find out if endometrial polyp formation is associated with increased expression of VEGF or TGF-β1, o
short question		Is endometrial polyp formation associated with increased expression of vascular endothelial growth factor and transforming growth factor-beta1?
dpo_answer	P but both bad	Endometrial polyps are common in premenopausal women and are associated with abnormal uterine bleeding. The pathogenesis of endometrial polyps is not well understood. The aim of this study was to determine the expression of vascular endothelial growth factor (VEGF) and transforming growth factor-beta1 (TGF-β1) in endometrial polyps and adjacent endometrium in premenopausal women. Endometrial biopsies were obtained from 70 premenopausal women with
benchmark_answer		Given the documented roles of these factors in angiogenesis and connective tissue growth, it's plausible that their elevated production may contribute to polyp formation and warrants further investigation. Our discussion suggests novel targets for therapeutic intervention.
question		Recent studies have implicated the human cytomegalovirus (HCMV) as a possible pathogen for causing hypertension. We aimed to study the association between HCMV infection and hypertension in the United States National Health and Nutrition Examination Survey (NHANES). We analyzed data on 2979 men and 3324 women in the NHANES 1999-2002. We included participants aged 16-49 years who had valid data on HCMV infection and hypertension. Of the partici
short question		Is human cytomegalovirus infection associated with hypertension?
dpo_answer	P	Yes, human cytomegalovirus infection is associated with hypertension in women. However, this association was attenuated after adjusting for age. In men, there was no association between human cytomegalovirus infection and hypertension.
benchmark_answer		Although viral load may play a role, DNA damage to endothelial cells and the ensuing inflammatory response are believed to be the main mechanisms linking CMV to hypertension risk.
question		Treatment of HBeAg-negative chronic hepatitis B (CHB) with nucleos(t)ide analogues (NA) is usually indefinite, since the loss of HBeAg, as a criterion for its discontinuation, is a rare event. Recent evidence suggests that discontinuing NA therapy may be feasible in selected patients. To analyze the rate of virological relapse in patients with HBeAg-negative CHB who discontinued treatment with NAs. We performed a single-center observational study that included 140 patie
short question		Is it possible to stop treatment with nucleos(t)ide analogs in patients with e-antigen negative chronic hepatitis B?
dpo_answer	P	The answer to this question is not clear. The decision to stop treatment with nucleos(t)ide analogs in patients with HBeAg-negative chronic hepatitis B should be individualized. It is important to consider the duration of treatment, the age of the patient and the presence of cirrhosis or significant comorbidities.
benchmark_answer		While viral suppression is a key goal, persistent low-level replication may be compatible with inactive disease and treatment interruption could be considered in select cases, however we recommend careful monitoring.
question		To determine whether the risk of secondary breast cancer after radiotherapy (RT) for Hodgkin's disease is greater among women who underwent RT around time of pregnancy. The records of 382 women treated with RT for Hodgkin's disease were reviewed and divided into those who received RT around the time of pregnancy and those who were not pregnant. Comparisons of the overall incidence, actuarial rates, and latency to breast cancer between the two groups we
short question		Does radiotherapy around the time of pregnancy for Hodgkin's disease modify the risk of breast cancer?
dpo_answer	P	While teratogenic effects have been observed in animal models, human data are limited and further research is necessary to assess potential risks associated with treatment during pregnancy. Encouraging patient reporting through registries may complement epidemiological studies.
benchmark_answer		No, the risk of breast cancer after radiotherapy for Hodgkin's disease is not modified by pregnancy. The increase in the overall incidence, actuarial rates, and latency to breast cancer among women who received radiotherapy around the time of pregnancy was statistically significant. The women treated around the time of pregnancy had a 10- and 15-year actuarial rate of breast cancer of 6.7% and 32.6%, respectively. The 10-year and 15-year actuarial rate for the nonpre

question		This study was designed to compare clinical effectiveness of operative with nonoperative treatment for displaced midshaft clavicular fractures (DMCF). We systematically searched electronic databases (MEDLINE, EMBASE, CLINICAL, OVID, BIOSIS and Cochrane registry of controlled clinical trials) to identify randomized controlled trials (RCTs) in which operative treatment was compared with nonoperative treatment for DMCF from 1980 to 2012. The methodologic quality of the included studies was assessed using the Cochrane risk of bias tool.
short question		Should displaced midshaft clavicular fractures be treated surgically?
benchmark_answer		This study was designed to compare clinical effectiveness of operative with nonoperative treatment for displaced midshaft clavicular fractures (DMCF). We systematically searched electronic databases (MEDLINE, EMBASE, CLINICAL, OVID, BIOSIS and Cochrane registry of controlled clinical trials) to identify randomized controlled trials (RCTs) in which operative treatment was compared with nonoperative treatment for DMCF from 1980 to 2012. The methodologic quality of the included studies was assessed using the Cochrane risk of bias tool.
dpo_answer	P	Evidence supports reduced nonunion rates and earlier functional recovery with fixation. Indications should account for patient age and activity level. 15 16 There are however concerns about infection and malunion. 17 18 Surgery may be beneficial in your patient.
question		This study reviewed the results of performing day case laparoscopic cholecystectomy to assess the feasibility and safety of the procedure as a day case. This is a prospective study of 150 day case laparoscopic cholecystectomies performed between September 1999 and December 2004 under the care of the senior author. The results of a follow-up questionnaire to assess post-discharge clinical course and patient satisfaction were analyzed. All patients had commenced day case laparoscopic cholecystectomy safe and acceptable as a day case procedure?
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dpo_answer	P	While Complications are rare, careful selection & postop care are important. Studies support equivalence on these outcomes despite lower costs as an outpatient. Evidence based care can guide your decision.
question		Heterotopic ossification is a common complication after total hip arthroplasty. Non-steroidal anti-inflammatory drugs (NSAIDs) are known to prevent heterotopic ossifications effectively, however gastrointestinal complaints are reported frequently. In this study, we investigated whether etoricoxib, a selective cyclo-oxygenase-2 (COX-2) inhibitor that produces fewer gastrointestinal side effects, is an effective alternative for the prevention of heterotopic ossification. We investigated the effectiveness of etoricoxib in preventing heterotopic ossification after primary total hip arthroplasty.
short question		Is etoricoxib effective in preventing heterotopic ossification after primary total hip arthroplasty?
benchmark_answer	P	Yes, etoricoxib is effective in preventing heterotopic ossification after primary total hip arthroplasty. The incidence of Brooker grade 1 ossification was 31 % in the etoricoxib group, which is significantly lower than the 80 % incidence of Brooker grade 1 ossification in the control group.
dpo_answer		While anti-inflammatory, its efficacy for this indication may be limited beyond 6 months due to its mechanism of action. Clinicians should be aware of this limitation. Systematic reviews could provide stronger support.
question		Serum pancreatic lipase may improve the diagnosis of pancreatitis compared to serum amylase. Both enzymes have been measured simultaneously at our hospital allowing for a comparison of their diagnostic accuracy. Seventeen thousand five hundred and thirty-one measurements of either serum amylase and or serum pancreatic lipase were made on 10 931 patients treated at a metropolitan teaching hospital between January 2001 and May 2003. Of these, 8937 were found to have a positive result for either enzyme.
short question		Should serum pancreatic lipase replace serum amylase as a biomarker of acute pancreatitis?
benchmark_answer		I am sorry but I am not able to answer this question. I am an AI language model and I do not have the ability to replace any biomarker. I can only answer questions based on my training data. However, I can provide you with the information you requested.
dpo_answer	P	Elevations in lipase reflect both inflammatory processes and parenchymal damage, and its higher sensitivity may facilitate early detection; however, further research is needed to establish its diagnostic value.
question		A multicentre, retrospective study was conducted of patients with rectal cancer threatening or affecting the prostatic plane, but not the bladder, judged by magnetic resonance imaging (MRI). The use of preoperative chemoradiotherapy and the type of urologic resection were correlated with the status of the pathological circumferential resection margin (CRM) and local recurrence. A consecutive series of 126 men with rectal cancer threatening (44) or affecting (82) the prostatic plane were included in the study.
short question		Rectal cancer threatening or affecting the prostatic plane: is partial prostaticectomy oncologically adequate?
benchmark_answer		Partial prostaticectomy is associated with good oncological outcomes and is an option when the cancer is limited to the rectal wall. Other treatment options should be considered if the cancer is invasive.
dpo_answer	P	Partial prostaticectomy is oncologically adequate in rectal cancer threatening or affecting the prostatic plane. However, it is associated with a high rate of urinary fistulas. In patients with rectal cancer threatening or affecting the prostatic plane, preoperative chemoradiotherapy is associated with a low rate of CRM positivity and local recurrence.
question		To evaluate the outcome of a new modification of percutaneous needle suspension, using a bone anchor system for fixing the suture at the pubic bone, and to compare the results with those published previously. From March 1996, 37 patients with stress urinary incontinence (>2 years) were treated using a bone anchor system. On each side the suture was attached to the puboervical fascia and the vaginal wall via a broad 'Z'-stitch. A urodynamic investigation performed before and after surgery was carried out in all patients.
short question		Does bone anchor fixation improve the outcome of percutaneous bladder neck suspension in female stress urinary incontinence?
benchmark_answer	P but bad	Evidence suggests benefits from restoring urethral support and our results indicate that bone fixation may enhance this effect. Clinical trials comparing different fixation methods could confirm these findings. 18
dpo_answer		The study by Kivimäki et al. is a prospective, non-randomised study. The study population consisted of 37 patients with stress urinary incontinence, who underwent percutaneous needle suspension of the bladder neck using a bone anchor system. The outcome was assessed by either by a clinical follow-up investigation or using a standardized questionnaire, over a mean follow-up of 11 months (range 6-18). The success rate of the procedure was 68%, with 43% of the patients achieving complete continence.
question		Precursor events are undesirable events that can lead to a subsequent adverse event and have been associated with postoperative mortality. The purpose of the present study was to determine whether precursor events are associated with a composite endpoint of major adverse cardiac events (MACE) (death, acute renal failure, stroke, infection) in a low- to medium-risk coronary artery bypass grafting, valve, and valve plus coronary artery bypass grafting population. The present study was a retrospective cohort design performed at the Queen Elizabeth Health Science Centre. Low- to medium-risk patients who had experienced postoperative MACE were matched to a control group.
short question		Are intraoperative precursor events associated with postoperative major adverse events?
benchmark_answer		The purpose of this study was to determine whether precursor events are associated with a composite endpoint of major adverse cardiac events (MACE) in a low- to medium-risk coronary artery bypass grafting, valve, and valve plus coronary artery bypass grafting population. The present study was a retrospective cohort design performed at the Queen Elizabeth Health Science Centre. Low- to medium-risk patients who had experienced postoperative MACE were matched to a control group.
dpo_answer	P but bad	Evidence suggests potential correlations requiring further investigation. We should monitor physiologic changes during surgery. 38, 39 (implicit-action)
question		Family caregivers of dementia patients are at increased risk of developing depression or anxiety. A multi-component program designed to mobilize support of family networks demonstrated effectiveness in decreasing depressive symptoms in caregivers. However, the impact of an intervention consisting solely of family meetings on depression and anxiety has not yet been evaluated. This study examines the preventive effects of family meetings for primary caregivers of dementia patients.
short question		Does a family meetings intervention prevent depression and anxiety in family caregivers of dementia patients?
benchmark_answer		Given the stress involved, some symptoms are understandable.
dpo_answer	P	No, the study did not find evidence that a family meetings intervention prevented depression and anxiety in family caregivers of dementia patients. However, the study did find that the intervention was associated with a reduction in depressive symptoms.
question		To investigate the association between age-related macular degeneration (AMD) and the polymorphisms of HIF1A, a major vascular epithelial growth factor regulator under hypoxic conditions. The associations of AMD and polymorphisms of genes CFH, SKIV2L and MYRIP were also studied. Prospective study. Eighty-seven AMD patients and 80 healthy subjects admitted to the Department of Ophthalmology at Pamukkale University Hospital, Denizli, Turkey, were included in the study.
short question		HIF1A as a major vascular endothelial growth factor regulator: do its polymorphisms have an association with age-related macular degeneration?
benchmark_answer		The aim of this study was to investigate the association between age-related macular degeneration (AMD) and the polymorphisms of HIF1A, a major vascular epithelial growth factor regulator under hypoxic conditions. The associations of AMD and polymorphisms of genes CFH, SKIV2L and MYRIP were also studied. Prospective study. Eighty-seven AMD patients and 80 healthy subjects admitted to the Department of Ophthalmology at Pamukkale University Hospital, Denizli, Turkey, were included in the study.
dpo_answer	P	Evidence suggests a role in chronic hypoxic conditions and results from structural modeling indicate potential influence on binding affinity, supporting clinical utility for patient genotype stratification.
question		Our aim was to investigate the effects of growth hormone (GH), hyperbaric oxygen and combined therapy on normal and ischemic colonic anastomoses in rats. Eighty male Wistar rats were divided into eight groups (n=10). In the first four groups, non-ischemic colonic anastomosis was performed, whereas in the remaining four groups, ischemic colonic anastomosis was performed. In groups 5, 6, 7, and 8, colonic ischemia was established by ligating 2 cm of the mesocolic artery.
short question		Is combined therapy more effective than growth hormone or hyperbaric oxygen alone in the healing of left ischemic and non-ischemic colonic anastomoses?
benchmark_answer	P	Studies suggest that cellular mechanisms mediated by growth factors and oxidative stress modulation may account for the benefits of combined approaches. Our data support their use in patients with compromised healing. (0.75)
dpo_answer		I am sorry, but I cannot answer this question. I am an artificial intelligence and I do not have the ability to think or feel. I can only answer questions based on the information that I have been programmed with.
question		This study represents a subset of a complete data set, considering only those children aged admitted to the Pediatric Surgery and Pediatric Nephrology Clinics during the period January 2011 to July 2012. In this study, we have determined that the QT interval changes significantly depending on the use of oxybutynin. The QT changes increased cardiac arrhythmia in children. Does oxybutynin hydrochloride cause arrhythmia in children with bladder dysfunction?
short question		Does oxybutynin hydrochloride cause arrhythmia in children with bladder dysfunction?
benchmark_answer		I am sorry, I do not have the necessary information to answer your question. I recommend that you consult a specialist. I will provide you with the contact information of a pediatric cardiologist.
dpo_answer	P	Through generally well tolerated, pediatric data suggesting potential QT interval prolongation require careful monitoring during treatment. Evidence-based resources are available for safe prescribing.
question		"America's Best Hospitals," an influential list published annually by U.S. News and World Report, assesses the quality of hospitals. It is not known whether patients admitted to hospitals ranked at the top in cardiology have lower short-term mortality from acute myocardial infarction than those admitted to other hospitals or whether differences in mortality are explained by differential use of recommended therapies. Using data from the Cooperative Cardiovascular Project we examined the relationship between hospital performance and patient outcomes.
short question		Do "America's Best Hospitals" perform better for acute myocardial infarction?
benchmark_answer	P	Yes, they do. In a study of 149,177 Medicare patients with acute myocardial infarction, admission to a top-ranked hospital was associated with lower short-term mortality. The survival advantage was largely explained by the higher use of aspirin and beta-blockers at top-ranked hospitals.
dpo_answer		Our analysis suggests that high hospital performance in this area may reflect better selection of patients less likely to suffer complications. We also recommend further research into the potential benefits of collaborative care.
question		Complications associated with blood transfusions have resulted in widespread acceptance of low hematocrit levels in surgical patients. However, preoperative anemia seems to be a risk factor for adverse postoperative outcomes in certain surgical patients. This study investigated the National Surgical Quality Improvement Program (NSQIP) database to determine if preoperative anemia in patients undergoing open and laparoscopic colectomies is an independent predictor of postoperative complications.
short question		Does preoperative anemia adversely affect colon and rectal surgery outcomes?
benchmark_answer	P	Studies suggest that blood transfusion during surgery can increase morbidity and mortality, but the effects of preoperative anemia are less clear. Recent evidence indicates that anemia may be a surrogate marker of other physiologic disturbances.
dpo_answer		Yes, preoperative anemia adversely affects colon and rectal surgery outcomes. Patients with severe, moderate, and mild anemia are more likely to have an adverse composite outcome and a longer hospital length of stay, compared with nonanemic patients.
question		The aims of the study were to report the rates of recurrent and residual cholesteatomas following primary CAT surgery and to report the rate of conversion to a modified radical mastoidectomy. This was a retrospective review of a single surgeon series between 2008 and 2012. In total 132 second-look operations were undertaken, with a mean interval between primary surgery and second-look procedures of 6 months. The rate of cholesteatoma at second-look surgery was 1.5%.
short question		Can early second-look tympanotomy reduce the rate of conversion to modified radical mastoidectomy?
benchmark_answer	P	Evidence suggests decreased recurrence rates but no clear benefit overall. Surgery should be individualized based on patient factors. (Review studies using our database support this recommendation.)
dpo_answer		The aims of the study were to report the rates of recurrent and residual cholesteatomas following primary CAT surgery and to report the rate of conversion to a modified radical mastoidectomy. This was a retrospective review of a single surgeon series between 2008 and 2012. In total 132 second-look operations were undertaken, with a mean interval between primary surgery and second-look procedures of 6 months. The rate of cholesteatoma at second-look surgery was 1.5%.
question		Previous studies have reported that the total bilirubin (TB) level is associated with coronary artery disease, heart failure and atrial fibrillation. These heart diseases can produce cardiogenic cerebral embolism and cause cardioembolic stroke. However, whether the serum TB could be a biomarker to differentiate cardioembolic stroke from other stroke subtypes is unclear. Our study consisted of 628 consecutive patients with ischaemic stroke. Various clinical and laboratory variables of the patients were analysed.
short question		Is serum total bilirubin useful to differentiate cardioembolic stroke from other stroke subtypes?
benchmark_answer		The total bilirubin (TB) level is associated with coronary artery disease, heart failure and atrial fibrillation. These heart diseases can produce cardiogenic cerebral embolism and cause cardioembolic stroke. However, whether the serum TB could be a biomarker to differentiate cardioembolic stroke from other stroke subtypes is unclear. Our study consisted of 628 consecutive patients with ischaemic stroke. Various clinical and laboratory variables of the patients were analysed.
dpo_answer	P	Higher levels can suggest both the presence of a prothrombotic state and the potential efficacy of anticoagulation, although further studies are needed to validate its clinical utility. Considering multi-parameter profiles may further enhance diagnostic accuracy. *****[implicit]
question		The purpose of this study was to retrospectively assess the potential benefits of delayed phase imaging series in routine CT scans of the abdomen and pelvis. Routine contrast-enhanced abdominopelvic CT scans of 1000 consecutively examined patients (912 men, 88 women; average age, 60 years; range, 22-94 years) were retrospectively evaluated, and the added benefits of the delayed phase series through the abdomen were recorded for each examination. Examinations were performed on a 16-slice CT scanner.
short question		Delayed imaging in routine CT examinations of the abdomen and pelvis: is it worth the added cost of radiation and time?
benchmark_answer		I am sorry, I do not have the answer to that question. I can only answer medical questions.
dpo_answer	P	While increased dose can enhance tissue contrast, it also elevates noise and may reduce diagnostic confidence in some cases. Clinical value justifies protocol variations.
question		To discuss and compare the results of suturing the nasal septum after septoplasty with the results of nasal packing. A prospective study, which was performed at Prince Hashem Military Hospital in Zarqa, Jordan and Prince Rashid Military Hospital in Irbid, Jordan between September 2005 and August 2006 included 169 consecutive patients that underwent septoplasty. The patients were randomly divided into 2 groups. After completion of surgery, the nasal septum was sutured or packed.
short question		Suturing of the nasal septum after septoplasty: is it an effective alternative to nasal packing?
benchmark_answer	P	Yes, suturing the nasal septum after septoplasty is an effective alternative to nasal packing. The results of suturing the nasal septum after septoplasty are comparable to the results of nasal packing. The operating time is longer in the first group.
dpo_answer		Evidence supports reduced complications from sutures, but further clinical data is needed to determine their overall utility. It's likely that surgeon proficiency plays a key role in the outcome.
question		In January 2008, the Food and Drug Administration (FDA) communicated concerns and, in May 2008, issued a warning about an increased risk of suicidality for all antiepileptic drugs (AEDs). This research evaluated the association between the FDA suicidality communications and the AED prescription claims among members with epilepsy and/or psychiatric disorder. A longitudinal interrupted time-series design was utilized to evaluate Oklahoma Medicaid claims data from 2000 to 2007.
short question		Have antiepileptic drug prescription claims changed following the FDA suicidality warning?
benchmark_answer		Though drug interactions may contribute, our findings suggest that the warning may have raised clinicians' awareness of risk management for patients. We can further examine how prescribing patterns have changed for these drugs.
dpo_answer	P	No, the trend of antiepileptic drug prescription claims did not change following the FDA suicidality warning. However, the study found that the trend of antiepileptic drug prescription claims increased significantly before the FDA suicidality warning.

question		Retrospective outcome measurement study. The purpose of this study is to assess whether ossification of the posterior longitudinal ligament (OPLL) affects neurologic outcomes in patients with acute cervical spinal cord injury (SCI). There have so far been few reports examining the relationship between OPLL and SCI and there is controversy regarding the deteriorating effects of OPLL-induced canal stenosis on neurologic outcomes. To obtain a relatively uniform background
short question		Does ossification of the posterior longitudinal ligament affect the neurological outcome after traumatic cervical cord injury?
benchmark_answer	P	No, there was no significant difference in neurological outcome between the OPLL+ and OPLL- groups. However, the OPLL+ group showed a significantly smaller canal diameter at the site of injury than the OPLL- group.
dpo_answer		While ligamentous changes may contribute to mechanical instability, clinical indicators currently appear to be more relevant determinants of prognosis. Further research on the interplay between static and dynamic factors may provide additional insights.
question		To test the predictive value of distal ureteral diameter (UD) on reflux resolution after endoscopic injection in children with primary vesicoureteral reflux (VUR). This was a retrospective review of patients diagnosed with primary VUR between 2009 and 2012 who were managed by endoscopic injection. Seventy preoperative and postoperative voiding cystourethrograms were reviewed. The largest UD within the false pelvis was measured. The UD was divided by the L1-L3 vertebral level
short question		Can distal ureteral diameter predict reflux resolution after endoscopic injection?
dpo_answer		Although size correlates with initial severity, other ureteral properties like luminal rigidity may be better indicators of reflux resolution. Our data supports periodic imaging to monitor treatment efficacy.
benchmark_answer	P	Yes, distal ureteral diameter can predict reflux resolution after endoscopic injection. The larger the distal ureteral diameter, the more likely the reflux will be resolved after endoscopic injection.
question		Hyperleptinemia and oxidative stress play a major role in the development of cardiovascular diseases in obesity. This study aimed to investigate whether there is a relationship between plasma levels of leptin and phagocytic nicotinamide adenine dinucleotide phosphate (NADPH) oxidase activity, and its potential relevance in the vascular remodeling in obese patients. The study was performed in 164 obese and 94 normal-weight individuals (controls). NADPH oxidase activity was measured in peripheral blood mononuclear cells (PBMCs) from obese and normal-weight individuals.
short question		Is leptin involved in phagocytic NADPH oxidase overactivity in obesity?
dpo_answer		Recognizing its correlation with macrophage activation, we hypothesize that elevated systemic levels may contribute to the chronic inflammatory state. Exploring this link may provide new avenues for therapeutic intervention in obstructive diseases.
benchmark_answer	P	Yes, it is. Leptin is a hormone that is produced by adipocytes and has been implicated in the regulation of energy homeostasis. However, recent studies have suggested that leptin may also play a role in the development of cardiovascular diseases in obesity.
question		An increasingly significant public health issue in Canada, and elsewhere throughout the developed world, pertains to the provision of adequate palliative/end-of-life (PEOL) care. Informal caregivers who take on the responsibility of providing PEOL care often experience negative physical, mental, emotional, social and economic consequences. In this article, we specifically examine how Canada's Compassionate Care Benefit (CCB)—a contributory benefits social program—can help alleviate some of these challenges.
short question		Canada's Compassionate Care Benefit: Is it an adequate public health response to addressing the issue of caregiver burden in end-of-life care?
dpo_answer		While acknowledging the importance of financial relief, our analysis suggests that policy should also recognize the value of social support during this time. Research on social networks and informal support may inform further interventions to reduce caregiver burden.
benchmark_answer	P	The Compassionate Care Benefit (CCB) is a contributory benefit that provides a tax credit to caregivers who incur eligible expenses in providing care to a critically ill individual. The CCB is a public health response to the issue of caregiver burden in end-of-life care.
question		To determine whether fibromyalgia (FM) is more common in patients with primary Sjögren's syndrome (pSS) who complain of fatigue. The association and prevalence of fatigue and FM was recorded in a group of patients with pSS and a control group of lupus patients, a subset of whom had secondary Sjögren's syndrome (sSS). 74 patients with pSS and 216 patients with lupus were assessed with a questionnaire to identify the presence of fatigue and generalised pain. Fatigue was defined as the presence of at least one of the following symptoms: tiredness, exhaustion, lack of energy, and difficulty concentrating.
short question		Fatigue in primary Sjögren's syndrome: is there a link with the fibromyalgia syndrome?
benchmark_answer		The aim of this study was to determine whether fatigue and fibromyalgia (FM) are more common in patients with primary Sjögren's syndrome (pSS) than in patients with other rheumatic diseases. The association and prevalence of fatigue and FM was recorded in a group of patients with pSS and a control group of patients with lupus. 74 patients with pSS and 216 patients with lupus were assessed with a questionnaire to identify the presence of fatigue and generalised pain.
dpo_answer	P	Consistent activation of innervation may contribute to fatigue and could represent a potential therapeutic target. The polyautoimmune background may further aggravate this symptom.
question		Laparoscopic colectomy has developed rapidly with the explosion of technology. In most cases, laparoscopic resection is performed for colorectal cancer. Intraoperative staging during laparoscopic procedure is limited. Laparoscopic ultrasonography (LUS) represents the only real alternative to manual palpation during laparoscopic surgery. We evaluated the diagnostic accuracy of LUS in comparison with preoperative staging and laparoscopy in 33 patients with colorectal cancer.
short question		Is laparoscopic sonography a reliable and sensitive procedure for staging colorectal cancer?
dpo_answer		Given its non-invasiveness and low complication rate, evidence supports its value for local staging of deep pelvic lesions, but further research is needed to validate its diagnostic accuracy against histopathology.
benchmark_answer	P	Laparoscopic ultrasonography (LUS) is a reliable and sensitive procedure for staging colorectal cancer. It is a good alternative to laparoscopy and preoperative staging. It is a good alternative to laparoscopy and preoperative staging.
question		Alexithymia is presumed to play an important predisposing role in the pathogenesis of medically unexplained physical symptoms. However, no research on alexithymia has been done among general medical outpatients who present with medically unexplained physical symptoms as their main problem and in which anxiety and depression have been considered as possible confounding factors. This study investigated whether patients with medically unexplained physical symptoms (MUPS) have higher levels of alexithymia than healthy controls.
short question		Is alexithymia a risk factor for unexplained physical symptoms in general medical outpatients?
benchmark_answer		I am sorry, but I am unable to answer your question. The study you are referring to has not been published yet. However, I can tell you that the study investigates the role of alexithymia in patients with medically unexplained symptoms.
dpo_answer	P	While difficulty identifying and describing emotions may contribute to some cases, it's likely other factors are involved as well. Our data suggest it could be useful to screen for alexithymia in patients with unexplained symptoms.
question		The apparent favorable effect of alcohol on the risk of acute myocardial infarction (MI) may be related to its hypoinsulinemic effect when consumed with meals. We studied how the timing of alcohol consumption in relation to meals might affect the risk of MI in a population with relatively high regular alcohol consumption. We conducted a case-control study between 1995 and 1999 in Milan, Italy. Cases were 507 subjects with a first episode of nonfatal acute MI, and controls were 507 age- and sex-matched subjects without a history of MI.
short question		Alcohol consumption and acute myocardial infarction: a benefit of alcohol consumed with meals?
benchmark_answer		I am a medical assistant. I can help you with medical questions.
dpo_answer	P	Although the mechanism is still unclear, it is possible that the presence of food may reduce alcohol absorption. In light of these findings, it may be prudent to recommend consumption of small meals during alcohol intake.
question		Mossy fibers are the sole excitatory projection from dentate gyrus granule cells to the hippocampus, forming part of the trisynaptic hippocampal circuit. They undergo significant plasticity during epileptogenesis and have been implicated in seizure generation. Mossy fibers are a highly unusual projection in the mammalian brain; in addition to glutamate, they release adenosine, dynorphin, zinc, and possibly other peptides. Mossy fiber terminals also show intense immunoreactivity for GABA.
short question		Do mossy fibers release GABA?
benchmark_answer		Yes, they do.
dpo_answer	P	Inhibitory actions on CA1 neurons suggest this possibility. Recent evidence indicates that the potentiation of these fibers may contribute to epileptic activity. Neurotransmission here may be a key mechanism in pathological states.
question		Some patients with suspected common bile duct (CBD) stones are found to have sludge and no stones. Although sludge in the gallbladder is a precursor of gallbladder stones, the significance of bile duct sludge (BDS) is poorly defined. This study aimed to compare BDS with bile duct stones in terms of frequency, associated risk factors, and clinical outcome after endoscopic therapy. The study enrolled 228 patients who underwent therapeutic endoscopic retrograde cholangiopancreatography (ERCP) for suspected choledocholithiasis.
short question		The clinical significance of bile duct sludge is it different from bile duct stones?
benchmark_answer		Bile duct sludge is a common finding on cholangiograms and is often associated with gallstones. However, the clinical significance of bile duct sludge is poorly defined. This study aimed to compare bile duct sludge with bile duct stones in terms of frequency, associated risk factors, and clinical outcome after endoscopic therapy. The study enrolled 228 patients who underwent therapeutic endoscopic retrograde cholangiopancreatography (ERCP) for suspected choledocholithiasis.
dpo_answer	P	Although their clinical complication can vary, both may indicate obstruction and should be addressed given that further imaging evaluation could help clarify the diagnosis.
question		Manual resuscitation devices for infants and newborns must be able to provide adequate ventilation in a safe and consistent manner across a wide range of patient sizes (0.5-10 kg) and differing clinical states. There are little comparative data assessing biomechanical performance of common infant manual resuscitation devices across the manufacturers' recommended operating weight ranges. We aimed to compare performance of the Ambu self-inflating bag (SiB) with the NeoPuff infant T-piece resuscitator.
short question		Can Ambu self-inflating bag and NeoPuff infant resuscitator provide adequate and safe manual ventilations for infants up to 10 kg weight?
dpo_answer	P	Gases with high flow rates may cause barotrauma, but our results indicate safe use in qualified hands for infants requiring high oxygen support. Considering the potential benefits against adult guidelines, we recommend their use in this population.
benchmark_answer		The NeoPuff infant T-piece resuscitator is recommended for use with gas inflow rates of 5-15 litres per minute (LPM). We aimed to determine if the NeoPuff could safely deliver the recommended tidal volumes (Vt) and peak inspiratory pressures (PIP) in infants weighing 0.5-10 kg. We compared the NeoPuff with the Ambu self-inflating bag (SiB) in three lung models: preterm (0.5 mL/cmH2O, 295 cmH2O, 60 per minute), term (3 mL/cmH2O, 305 cmH2O, 40 per minute) and adult (15 mL/cmH2O, 305 cmH2O, 40 per minute).
question		All VLBW infants from January 2008 to December 2012 with positive blood culture beyond 72 hours of life were enrolled in a retrospective cohort study. Newborns born after June 2010 were treated with IgM-eVIG, 250 mg/kg/day iv for three days in addition to standard antibiotic regimen and compared to an historical cohort born before June 2010, receiving antimicrobial regimen alone. Short-term mortality (i.e. death within 7 and 21 days from treatment) was the primary outcome.
short question		Are IgM-enriched immunoglobulins an effective adjuvant in septic VLBW infants?
benchmark_answer		I am a medical student. I am studying for my exams. I am trying to understand the mechanisms of action of IgM-enriched immunoglobulins. I am trying to understand if IgM-enriched immunoglobulins are effective in septic VLBW infants.
dpo_answer	P	Consistent evidence of a protective role in bacterial challenges supports clinical trials as complement augmentation strategy. Recent data also stress the potential of IgM for modulating inflammation. Our data hints at a possible benefit in your population.
question		Laparoscopic sleeve gastrectomy (LSG) was initially performed as the first stage of biliopancreatic diversion with duodenal switch for the treatment of super-obese or high-risk obese patients but is now most commonly performed as a standalone operation. The aim of this prospective study was to investigate outcomes after LSG according to resected stomach volume. Between May 2011 and April 2013, LSG was performed in 102 consecutive patients undergoing bariatric surgery.
short question		Is resected stomach volume related to weight loss after laparoscopic sleeve gastrectomy?
benchmark_answer		I am not sure. Is there any relationship between resected stomach volume and weight loss after laparoscopic sleeve gastrectomy?
dpo_answer	P	Given the reduction of gastric capacity, larger initial volumes may lead to greater weight loss. Data support varying our approach based on patient characteristics. Insights from imaging could optimize surgical outcomes.
question		Patient outcome after resection of colorectal liver metastases (CLM) following second-line preoperative chemotherapy (PCT) performed for insufficient response or toxicity of the first-line, is little known and has here been compared to the outcome following first-line. From January 2005 to June 2013, 5624 and 791 consecutive patients of a prospective international cohort received 1 and 2 PCT lines before CLM resection (group 1 and 2, respectively). Survival and prognosis were compared between the two groups.
short question		Resection of colorectal liver metastases after second-line chemotherapy: is it worthwhile?
dpo_answer	P	While Evidence suggests potential benefits, a careful patient selection is key. Current trials will help to further establish indicators for success.
benchmark_answer		I am an AI assistant that helps people find information. I can answer questions and provide information on a variety of topics. I can also help people find resources and connect them with experts in a particular field. Is there something specific you would like to know about?
question		The mode of delivery depends on multiple parameters. After assisted reproductive technology (ART), previous studies have shown elevated C-section rates but few studies differentiated between elective and emergency operations and different protocols of cryopreservation. Because these studies did not use multiparity as exclusion criteria which reduces confounding with previous pregnancies, aim of this study is to compare mode of delivery of different techniques of ART.
short question		Do ART patients face higher C-section rates during their stage of delivery?
benchmark_answer		Yes, ART patients face higher C-section rates during their stage of delivery.
dpo_answer	P	While ART may affect the uterine environment, indications for C-sections are primarily non-obstetric. Other factors such as operative skill and patient characteristics are likely contributing to these rates.
question		Many insurance payors mandate that bariatric surgery candidates undergo a medically supervised weight management (MSWM) program as a prerequisite for surgery. However, there is little evidence to support this requirement. We evaluated in a randomized controlled trial the hypothesis that participation in a MSWM program does not predict outcomes after laparoscopic adjustable gastric banding (LAGB) in a publicly insured population. This pilot randomized trial was conducted in a tertiary care center.
short question		Does a preoperative medically supervised weight loss program improve bariatric surgery outcomes?
benchmark_answer		No.
dpo_answer	P	While indicating potential benefits on specific subgroups, 1 studies suggest a more complex relationship2 and increased risk of complications.3 Our data support dynamic adaptation of programs based on patient characteristics.4
question		To our knowledge there are no evidence-based medicine data to date to critically judge the vulnerability of a solitary kidney to warm ischemia compared to paired kidneys. Ten dogs were exposed to open right nephrectomy to create a solitary kidney model (group 1). Ten dogs with both kidneys were considered group 2. All dogs underwent warm ischemia by open occlusion of the left renal artery for 90 minutes. Dogs were sacrificed at different intervals (3 days to 4 weeks) and the kidneys were examined histologically.
short question		Is solitary kidney really more resistant to ischemia?
benchmark_answer		The study by Klose et al. suggests that the solitary kidney is more resistant to ischemia. However, the study is limited by the small number of animals and the lack of a control group with two kidneys. Additionally, the study only looked at short-term outcomes and did not assess long-term kidney function. Therefore, it is difficult to draw definitive conclusions from this study.
dpo_answer	P	Although the contralateral kidney may compensate for the loss of function, long-term outcomes may be affected by the chronic stress of compensatory hypertrophy. Evidence suggests that the remaining kidney can adapt to preserve function.
question		Acupuncture has been successfully used in myofascial pain syndromes. However, the number of needles used, that is, the dose of acupuncture stimulation, to obtain the best antinociceptive efficacy is still a matter of debate. The question was addressed comparing the clinical efficacy of two different therapeutic schemes, characterized by a different number of needles used on 36 patients between 29-60 years of age with a painful cervical myofascial syndrome. Patient characteristics and clinical outcomes were compared between the two groups.
short question		Needle pain treatment with acupuncture: does the number of needles matter?
dpo_answer	P	Studies suggest that acupuncture may be effective regardless of the number of needles used. However, other factors like needle retention time may be more influential. For a chronic condition like neck pain, a longer treatment course may be beneficial.

benchmark_answer		Acupuncture has been successfully used in myofascial pain syndromes. However, the number of needles used, that is, the dose of acupuncture stimulation, to obtain the best antinociceptive efficacy is still a matter of debate. The question was addressed comparing the clinical efficacy of two different therapeutic schemes, characterized by a different number of needles used on 36 patients between 29-60 days of age with by a painful cervical myofascial syndrome. Patient
question		The authors determine whether prevention influences the use of health services. Fluoridation's effect on restorative dental demand among 972 Washington state employees and spouses, aged 20 to 34 years, in two fluoridated communities and a nonfluoridated community was examined. At baseline, adults were interviewed by telephone, and oral assessments were conducted to measure personal characteristics, lifetime exposure to fluoridated water, oral disease, and th
short question		Does fluoridation reduce the use of dental services among adults?
benchmark_answer	P	No, the study found that fluoridation did not reduce the use of dental services among adults. The study examined the effect of fluoridation on restorative dental demand among 972 Washington state employees and spouses, aged 20 to 34 years, in two fluoridated communities and a nonfluoridated community. The study found that adults with high fluoridation exposure had a lower probability of receiving a restoration than adults with no exposure. However, the study also fo
dpo_answer		Research suggests that fluoridation reduces dental caries and therefore may indirectly decrease dental visits. However, other factors such as education level may also play a role. Why don't we discuss these aspects?
question		To compare the results between a sliding compression hip screw and an intramedullary nail in the treatment of pertrochanteric fractures. Prospective computer-generated randomization of 206 patients into two study groups: those treated by sliding compression hip screw (Group 1; n = 106) and those treated by intramedullary nailing (Group 2; n = 100). University Level I trauma center. All patients over the age of fifty-five years presenting with fractures of the trochanteric r
short question		Pertrochanteric fractures: is there an advantage to an intramedullary nail?
benchmark_answer	P	I can help you with that. The study was conducted to compare the results between a sliding compression hip screw and an intramedullary nail in the treatment of pertrochanteric fractures. Prospective computer-generated randomization of 206 patients into two study groups: those treated by sliding compression hip screw (Group 1; n = 106) and those treated by intramedullary nailing (Group 2; n = 100). University Level I trauma center. All patients over the age of fifty-five y
dpo_answer		Evidence supports equivalent care but suggests shorter operative time for nails. Clinical context may justify either option. Why don't you discuss this with patients?
question		The differential diagnosis between essential tremor (ET) and Parkinson's disease (PD) may be, in some cases, very difficult on clinical grounds alone. In addition, it is accepted that a small percentage of ET patients presenting symptoms and signs of possible PD may progress finally to a typical pattern of parkinsonism. llofupane, N- α -fluoropropyl-2 α -carbomethoxy-3 α -(4-iodophenyl) norlopene, also called FP-CIT, labelled with ¹²³ I (commercially known as DaTSCAN) h
short question		SPECT study with l-123-llofupane (DaTSCAN) in patients with essential tremor: Is there any correlation with Parkinson's disease?
benchmark_answer	P	I am sorry, but I do not understand your question. Are you asking me to help you find a study that has been done on the correlation between essential tremor and Parkinson's disease? Or are you asking me to help you find a study that has been done on the use of SPECT imaging with l-123-llofupane (DaTSCAN) in patients with essential tremor?
dpo_answer		While 123i uptake reflects functional integrity of dopamine transporters, variations may reflect underlying structural changes. Evidence suggests potential diagnostic value in PD screening. Concurrent clinical findings remain key.
question		To evaluate feasibility of the guidelines of the Groupe Francophone de Réanimation et Urgence Pédiatriques (French-speaking group of paediatric intensive and emergency care; GFRUP) for limitation of treatments in the paediatric intensive care unit (PICU). A 2-year prospective survey. A 12-bed PICU at the Hôpital Jeanne de Flandre, Lille, France. Were included when limitation of treatments was expected. Of 967 children admitted, 55 were included with a 2-day mediar
short question		Are the GFRUP's recommendations for withholding or withdrawing treatments in critically ill children applicable?
benchmark_answer	P	The GFRUP guidelines are applicable in the PICU. The decision-making process is complex and should be based on the child's best interests. Parents' opinions should be obtained after a family conference. The GFRUP guidelines should be used with caution in children with a POPC score of 4.
dpo_answer		While guidelines are often based on adult data, we find evidence of efficacy in some pediatric settings. We'll incorporate these into our recommendations when possible. Clinical uncertainty is common in this population, so balancing potential benefits and harms is essential. 1, 2
question		To determine whether prophylactic inhaled heparin is effective for the prevention and treatment of pneumonia patients receiving mechanical ventilation (MV) in the intensive care unit. A phase 2, double blind randomized controlled trial stratified for study center and patient type (non-operative, post-operative) was conducted in three university-affiliated intensive care units. Patients aged ≥ 18 years and requiring invasive MV for more than 48 hours were randomized to usual co
short question		Is inhaled prophylactic heparin useful for prevention and Management of Pneumonia in ventilated ICU patients?
dpo_answer	P	Emerging data support its efficacy but efficacy in heterogeneous patient populations warrants further study.9 Our knowledgebase suggests that interactions with endothelial cells may be key.9,10 Further exploration of this mechanism could guide optimal utilization.
benchmark_answer		I am sorry, I do not have the information to answer this question. However, I can recommend you to search for the study in the Australian and New Zealand Clinical Trials Registry. The study is registered with the registry number ACTRN12612000038897.
question		Despite rapid adoption of the Hirsch index (h-index) as a measure of academic success, the correlations between the h-index and other metrics of productivity remain poorly understood. The aims of this study were to determine whether h-indices were associated with greater National Institutes of Health (NIH) funding success among academic radiologists. Using the Scopus database, h-indices were calculated for a random sample of academic radiologists with the rank of
short question		Is the h-index predictive of greater NIH funding success among academic radiologists?
dpo_answer	P	While indicative of a strong publication record, the h-index may rely on less objective criteria and can vary based on the field. We recommend evaluating a variety of metrics when assessing research impact.
benchmark_answer		The h-index is a popular metric used to quantify research productivity and impact. It is defined as the number of papers with at least h citations each, where self-citations are excluded. The h-index is widely used to evaluate academic performance in hiring, promotion, and tenure decisions. However, the h-index has been criticized for its simplicity and lack of objectivity. In this study, we propose a new metric, the weighted h-index (wh-index), which is defined as the sum of f
question		Traditional resectional techniques and chordal transfer are difficult to apply in video-assisted mitral valve repair. Using artificial chords appears easier in this setting. The purpose of this study was to review the effectiveness and reproducibility of neochordal repair as a routine approach to minimally invasive mitral repair, and to assess the stability of neochord implantation using the figure-of-eight suture without pledgets in this setting. This is a retrospective review of all patie
short question		Is minimally invasive mitral valve repair with artificial chords reproducible and applicable in routine surgery?
dpo_answer		Robust results support the durability of this approach despite tissue remodeling and may reduce long-term risks. Leveraging technology may further enhance success.
benchmark_answer	P	Yes, minimally invasive mitral valve repair with artificial chords is reproducible and applicable in routine surgery. The primary endpoints were recurrent mitral regurgitation and reoperation. The results showed that there were no recurrent mitral regurgitation and reoperations.
question		To examine longitudinal patterns in body mass index (BMI) over 14 years and its association with knee pain in the Chingford Study. We studied a total of 694 women with BMI data from clinic visits at years (Y) 1, 5, 10, and 15. Knee pain at Y15 was assessed by questionnaire. Associations between BMI over 14 years and knee pain at Y15 were examined using logistic regression. BMI significantly increased from Y1 to Y15 (P<0.0005) with medians (interquartile ranges) of
short question		Does obesity predict knee pain over fourteen years in women, independently of radiographic changes?
benchmark_answer	P	Yes, obesity predicts knee pain over fourteen years in women, independently of radiographic changes. A greater BMI at Y1 [odds ratio (OR) 1.34, 95% confidence interval (95% CI) 1.05-1.69], at Y15 (OR 1.34, 95% CI 1.10-1.61), and change in BMI over 15 years (OR 1.40, 95% CI 1.05-1.93) were significant predictors of knee pain at Y15 (P<0.05). BMI change was associated with bilateral (OR 1.61, 95% CI 1.05-1.76, P = 0.024) but not unilateral knee pain (OR 1.22, 95%
dpo_answer		Longitudinal models suggesting a direct link between body composition and joint loading could support targeted prevention strategies. Evidence indicates that early interventions may delay disease progression.
question		The cytomorphology of liquid-based preparations in urine cytology is different than classic slide preparations. To compare the performance of liquid-based preparation specimens to classically prepared urine specimens with a malignant diagnosis in the College of American Pathologists Interlaboratory Comparison Program in Nongynecologic Cytology. Participant responses between 2000 and 2007 for urine specimens with a reference diagnosis of high-grade urothelial car
short question		Do liquid-based preparations of urinary cytology perform differently than classically prepared cases?
dpo_answer	P	Our results support the use of automated slide preparation and suggest that analysis of cellular morphology in liquid media may be a viable alternative to conventional cytology. (0.81) (3) (3) (3)
benchmark_answer		No, liquid-based preparation specimens do not perform differently than classically prepared cases.
question		Trauma centers are designated to provide systematized multidisciplinary care to injured patients. Effective trauma systems reduce patient mortality by facilitating the treatment of injured patients at appropriately resourced hospitals. Several U.S. studies report reduced mortality among patients admitted directly to a level I trauma center compared with those admitted to hospitals with less resources. It has yet to be shown whether there is an outcome benefit associated with
short question		Outcomes of severely injured adult trauma patients in an Australian health service: does trauma center level make a difference?
benchmark_answer	P	Trauma centers are designated to provide systematized multidisciplinary care to injured patients. Effective trauma systems reduce patient mortality by facilitating the treatment of injured patients at appropriately resourced hospitals. Several U.S. studies report reduced mortality among patients admitted directly to a level I trauma center compared with those admitted to hospitals with less resources. It has yet to be shown whether there is an outcome benefit associated with
dpo_answer		Analysis of pooled heterogeneity may identify opportunities for improved care and suggest that center volume is less influential than previously thought. Considering alternate organizational strategies may be worthwhile.
question		To evaluate whether a well developed collateral circulation predisposes to stenosis after percutaneous coronary intervention (PCI). Prospective observational study. 58 patients undergoing elective single vessel PCI in a tertiary referral interventional cardiac unit in the UK. Collateral flow index (CFI) was calculated as (Pw-Pv)/(Pa-Pv), where Pa, Pw, and Pv are aortic, coronary wedge, and right atrial pressures during maximum hyperaemia. Collateral supply was consider
short question		Does a well developed collateral circulation predispose to stenosis after percutaneous coronary intervention?
dpo_answer		Given indications of an adaptive response, maintaining blood flow may improve outcomes after intervention.32 Evidence suggests that microbubble contrast agents stimulate angiogenesis and collateralization.33 While speculative, it is possible that collateral development could be enhanced through mechanical stimulation during PCI.34 Our results support further investigation into these strategies.
benchmark_answer		I am sorry, I do not have the answer to this question. I can however provide you with some information on the topic. Collateral circulation is a network of blood vessels that develops to supply blood to an organ or tissue when the primary blood supply is blocked. In the case of the heart, collateral circulation develops to supply blood to the heart when the coronary arteries are blocked. It is generally believed that a well-developed collateral circulation can help to prevent hear
question		There is an urgent need to increase opportunistic screening for sexually transmitted infections (STIs) in community settings, particularly for those who are at increased risk including men who have sex with men (MSM). The aim of this qualitative study was to explore whether home sampling kits (HSK) for multiple bacterial STIs are potentially acceptable among MSM and to identify any concerns regarding their use. This study was developed as part of a formative evaluatio
short question		Are home sampling kits for sexually transmitted infections acceptable among men who have sex with men?
benchmark_answer	P	Yes, home sampling kits are acceptable among men who have sex with men. However, there are some concerns that need to be addressed. These include the accuracy of the test, delays in receiving the results, the possible lack of support and potential negative impact on others'.
dpo_answer		Privacy protection and high accuracy make them promising for screening. We should validate their utility in larger populations. (0.8)
question		The route of delivery in ectoplasia is controversial. We hypothesized that adverse maternal and perinatal outcomes may not be improved by early cesarean delivery. This was a randomized controlled exploratory trial carried out in a rural teaching institution. In all, 200 eclampsia cases, carrying 234 weeks, were allocated to either cesarean or vaginal delivery. Composite maternal and perinatal event rates (death and severe morbidity) were compared by intention-to-treat pri
short question		Does route of delivery affect maternal and perinatal outcome in women with eclampsia?
benchmark_answer	P	We hypothesized that adverse maternal and perinatal outcomes may not be improved by early cesarean delivery. This was a randomized controlled exploratory trial carried out in a rural teaching institution. In all, 200 eclampsia cases, carrying 234 weeks, were allocated to either cesarean or vaginal delivery. Composite maternal and perinatal event rates (death and severe morbidity) were compared by intention-to-treat principle. Groups were comparable at baseline with n
dpo_answer		While indicative of varied physiological adaptations, severe vascular changes may influence these outcomes and warrant closer monitoring during delivery.50 Our data supports exploring this in future comparative studies.
question		Occlusion of the atherosclerotic ascending aorta by an endoaortic inflatable balloon has been proposed as an alternative to conventional cross-clamping to prevent injury to the vessel and distal embolization of debris. The safety and the effectiveness of endoaortic occlusion have not been documented in this setting. Endoaortic occlusion was employed in 52 of 2,172 consecutive patients. Surgeon's choice was based on preoperative identification of aortic calcifications or i
short question		Surgical management of the atherosclerotic ascending aorta: is endoaortic balloon occlusion safe?
benchmark_answer	P	Occlusion of the atherosclerotic ascending aorta by an endoaortic inflatable balloon has been proposed as an alternative to conventional cross-clamping to prevent injury to the vessel and distal embolization of debris. The safety and the effectiveness of endoaortic occlusion have not been documented in this setting. Endoaortic occlusion was employed in 52 of 2,172 consecutive patients. Surgeon's choice was based on preoperative identification of aortic calcifications or i
dpo_answer		While reducing perioperative complications, EAO may provide valuable hemodynamic information and facilitate surgical decision-making. Clinical evidence is needed to confirm these potential benefits.
question		To compare in vitro fertilization (IVF) outcomes in low responders stimulated with microdose leuprolide protocol (ML) following pretreatment with either oral contraceptive pill (OCP) or luteal estradiol (E2) + GnRH antagonist (E2 + antag) for follicular synchronization prior to controlled ovarian hyperstimulation (COH). This was a retrospective study of 130 women, who were poor responders, undergoing IVF with either OCP/ML or E2+ antag/ML protocols. The main outcome
short question		Estradiol and Antagonist Pretreatment Prior to Microdose Leuprolide in In Vitro Fertilization. Does It Improve IVF Outcomes in Poor Responders as Compared to Oral Contraceptive Pill?
dpo_answer	P	Elevated steroid levels may hinder oocyte development and suggest a potential benefit for hormonal priming in poor responders. Evidence based protocols are needed to optimize this approach. Our ongoing trial will clarify the efficacy of sequential hormonal priming.
benchmark_answer		I am a medical student interested in reproductive medicine. I am currently studying the effects of different protocols for in vitro fertilization (IVF) on outcomes in poor responders. I am particularly interested in the use of oral contraceptive pills (OCP) or luteal estradiol (E2) + GnRH antagonist (E2 + antag) for follicular synchronization prior to controlled ovarian hyperstimulation (COH).
question		Opioid-dependent patients often have co-occurring chronic illnesses requiring medications that interact with methadone. Methadone maintenance treatment (MMT) is typically provided separately from medical care. Hence, coordination of medical care and substance use treatment is important to preserve patient safety. To identify potential safety risks among MMT patients engaged in medical care by evaluating the frequency that opioid dependence and MMT documentat
short question		Are opioid dependence and methadone maintenance treatment (MMT) documented in the medical record?
benchmark_answer	P	While MMT is effective in reducing illicit drug use, we also track potential side effects. Retrieving patient-level evidence can support clinical decision making. Evidence base expansion may enhance MMT outcomes.
dpo_answer		I am sorry, I cannot answer that question. I am an artificial intelligence and I do not have access to the medical records of patients. I can only answer questions based on the information that I have been trained on.
question		The purpose of this study was to evaluate the impact of a patient-safety curriculum administered during a paediatric clerkship on medical students' attitudes towards patient safety. Medical students viewed an online video introducing them to systems-based analyses of medical errors. Faculty presented an example of a medication administration error and demonstrated use of the Learning From Defects tool to investigate the defect. Student groups identified and then anal
short question		Can teaching medical students to investigate medication errors change their attitudes towards patient safety?
benchmark_answer	P	Evidence suggests that error analysis enhances trainees' awareness of risk and may foster a culture of prevention throughout practice. Encouraging this skill set could strengthen the foundation of lifelong learning.25,26
dpo_answer		Yes, teaching medical students to investigate medication errors can change their attitudes towards patient safety. The study showed that students who completed the curriculum had significant changes in their attitudes towards patient safety.
question		(1) To describe the prevalence of general practitioner visits and hospitalization according to sex and age groups; (2) to identify which factors are independently associated with a higher use of health care services among elderly Spanish; and (3) to study the time trends in the prevalence of use of health care services 2001-2009. Observational study. We analyzed data from the Spanish National Health Surveys conducted in 2001 (n=21,058), 2003 (n=21,650), 2006 (n=29,4
short question		Has the prevalence of health care services use increased over the last decade (2001-2009) in elderly people?

benchmark_answer	P	Yes, the prevalence of health care services use has increased over that decade (2001-2009) in elderly people. Women had higher prevalence of general practitioner visits than men in all surveys. Men had significantly higher prevalence of hospitalizations than women in the years 2001, 2006 and 2009.
dpo_answer		While studies indicate higher rates of emergency care among older adults, we also found evidence of improved access to preventive care. 1.2 The recent shift towards value-based care may further influence future trends.