**Surgery - Musculoskeletal Questionss**

1. Sally suffered a burst fracture to her lumbar spine during a skiing accident. Dr. Phyllis performed a partial corpectomy to L2 by a transperitoneal approach followed by anterior arthrodesis of L1-L3. She also positioned anterior instrumentation and placed a structural allograft to L1-L3.
2. A patient suffered a fracture of the femur head. He had an open treatment of the femoral head with a replacement using a Medicon alloy femoral head and methyl methacrylate cement.
3. What modifier should you report when the same physician provided a re-reduction of a fracture?
4. A patient suffered a penetrating knife wound to his back. A surgeon performed wound exploration with enlargement of the site, debridement, and removal of gravel from the site. The surgeon decided a laparotomy procedure was not necessary at this time.
5. While playing at home, Riley dislocated his patella, when he fell from a tree. The surgeon documented an open dislocation. Riley underwent a closed treatment under anesthesia.
6. Sarah presented to her primary care physician with pain and swelling in the right elbow. After careful examination he referred her to an orthopedic surgeon for a second opinion. Dr. Femur diagnosed Sarah with acute osteomyelitis of the olecranon process and recommended surgery. Sarah agreed to the surgery and underwent a sequestrectomy, through a posterior incision, with a loose repair over drains ending the procedure. Dr. Femur sent a written report back to Sarah’s primary care physician along with the operative report.
7. Mike had a bicycle accident and suffered deep hematomas in both knees. He underwent a bilateral incision and drainage.
8. A patient had a unilateral percutaneous intradiscal electrothermal annuloplasty on L3-L5 with fluoroscopic guidance for needle placement. How would you report this professional service.
9. 52 year old female has a mass growing on her right flank for several years. It has finally gotten significantly larger and is beginning to bother her. She is brought to the Operating Room for definitive excision. An incision was made directly overlying the mass. The mass was down into the subcutaneous tissue and the surgeon encountered a well encapsulated lipoma approximately 4 centimeters. This was excised primarily bluntly with a few attachments divided with electrocautery.
10. PREOPERATIVE DIAGNOSIS: Right scaphoid fracture. TYPE OF PROCEDURE: Open reduction and internal fixation of right scaphoid fracture. DESCRIPTION OF PROCEDURE: The patient was brought to the operating room, anesthesia having been administered. The right upper extremity was prepped and draped in a sterile manner. The limb was elevated, exsanguinated, and a pneumatic arm tourniquet was elevated. An incision was made over the dorsal radial aspect of the right wrist. Skin flaps were elevated. Cutaneous nerve branches were identified and very gently retracted. The interval between the second and third dorsal compartment tendons was identified and entered. The respective tendons were retracted. A dorsal capsulotomy incision was made, and the fracture was visualized. There did not appear to be any type of significant defect at the fracture site. A 0.045 Kirschner wire was then used as a guidewire, extending from the proximal pole of the scaphoid distalward. The guidewire was positioned appropriately and then measured. A 25-mm Acutrak drill bit was drilled to 25 mm. A 22.5-mm screw was selected and inserted and rigid internal fixation was accomplished in this fashion. This was visualized under the OEC imaging device in multiple projections. The wound was irrigated and closed in layers. Sterile dressings were then applied. The patient tolerated the procedure well and left the operating room in stable condition.
11. An infant with genu valgum is brought to the operating room to have a bilateral medial distal femur hemiepiphysiodesis done. On each knee, the C-arm was used to localize the growth plate. With the growth plate localized, an incision was made medially on both sides. This was taken down to the fascia, which was opened. The periosteum was not opened. The Orthofix figure-of-eight plate was placed and checked with x-ray. We then irrigated and closed the medial fascia with 0 Vicryl suture. The skin was closed with 2-0 Vicryl and 3-0 Monocryl.
12. 42 year old male has a frozen left shoulder. An arthroscope was inserted in the posterior portal in the glenohumeral joint. The articular cartilage was normal except for some minimal grade III-IV changes, about 5% of the humerus just adjacent to the rotator cuff insertion of the supraspinatus. The biceps was inflamed, not torn at all. The superior labrum was not torn at all, the labrum was completely intact. The rotator cuff was completely intact. An anterior portal was established high in the rotator interval. The rotator interval was very thick and contracted and this was released with electrocautery and the Bovie including the superior glenohumeral ligament. After this was all released, the middle glenohumeral ligament was released as well as the *tendinous* portion of the subscapularis. After this was all done with a shaver and electrocautery, the arthroscope was placed anteriorly and the shaver and used to debride some of the posterior capsule and the posterior capsule was released in its posterosuperior and then posteroinferior aspect. After this was done, the arthroscope was then placed back posteriorly and used to release the anteroinferior capsule down to 6’oclock. This was done with electrocautery. The arthroscope was then placed anteriorly and used to release the posteroinferior capsule. The arthroscope was then placed anteriorly and used to release the posteroinferior capsule. The arthroscope was then placed back posteriorly and used to confirm that there was still one little strip of capsule around the biceps superiorly and there was one little strip from 6-7 o’clock posteroinferiorly that was only partially cut. The rest of the capsule was completely circumferentially released.
13. After adequate anesthesia was obtained the patient was turned prone in a kneeling position on the spinal table. A lower midline lumbar incision was made and the soft tissues divided down to the spinous processes. The soft tissues were stripped way from the lamina down to the facets and discectomies and laminectomies were then carried out at L3-4, L4-5 and L5-S1. Interbody fusions were set up for the lower three levels using the Danek allografts and augmented with structural autogenous bone from the iliac crest. The posterior instrumentation of a 5.5 mm diameter titanium rod was then cut to the appropriate length and bent to confirm to the normal lordotic curve. It was then slid immediately onto the bone screws and at each level compression was carried out as each of the two bolts were tightened so that the interbody fusions would be snug and as tight as possible.
14. PREOPERATIVE DIAGNOSIS: Displaced impacted Colles fracture, left distal radius and ulna. POSTOPERATIVE DIAGNOSIS: Displaced impacted Colles fracture, left distal radius and ulna. OPERATIVE PROCEDURE: Reduction with application external fixator, left wrist fracture FINDINGS: The patient is a 46-year-old right-hand-dominant female who fell off stairs 4 to 5 days ago sustaining an impacted distal radius fracture with possible intraarticular component and an associated ulnar styloid fracture. Today in surgery, fracture was reduced anatomically and an external fixator was applied. PROCEDURE: Under satisfactory general anesthesia, the fracture was manipulated and C-arm images were checked. The left upper extremity was prepped and draped in the usual sterile orthopedic fashion. Two small incisions were made over the second metacarpal and after removing soft tissues including tendinous structures out of the way, drawing was carried out and blunt-tipped pins were placed for the EBI external fixator. The frame was next placed and the site for the proximal pins was chosen. Small incision was made. Subcutaneous tissues were carried out of the way. The pin guide was placed and 2 holes were drilled and blunt-tipped pins placed. Fixator was assembled. C-arm images were checked. Fracture reduction appeared to be anatomic. Suturing was carried out where needed with 4-0 Vicryl interrupted subcutaneous and 4-0 nylon interrupted sutures. Sterile dressings were applied. Vascular supply was noted to be satisfactory. Final frame tightening was carried out.
15. The patient is a 66-year-old female who presents with Dupuytren's disease in the right palm and ring finger. This results in a contracture of the ring digit MP joint. She is having a subtotal palmar fasciectomy for Dupuytren's disease right ring digit and palm. An extensile Brunner incision was then made beginning in the proximal palm and extending to the ring finger PIP crease. This exposed a large pretendinous cord arising from the palmar fascia extending distally over the flexor tendons of the ring finger. The fascial attachments to the flexor tendon sheath were released. At the level of the metacarpophalangeal crease, one band arose from the central pretendinous cord-one coursing toward the middle finger. The digital nerve was identified, and this diseased fascia was also excised.
16. This is a 32 year old female who presents today with sacroilitis. On the physical exam there was pain on palpation of the left sacroiliac joint and imaging confirmation was done for the needle positioning. Then 80 mg of Depo-Medrol and 1 mL of bupivacaine at 0.5% was injected into the left sacroiliac joint with a 22 gauge needle. The patient was able to walk from the exam room without difficulty. Follow up will be as needed.
17. PREOPERATIVE DIAGNOSIS: Medial meniscus tear, right knee POSTOPERATIVE DIAGNOSIS: Medial meniscus tear, extensive synovitis with an impingement medial synovial plica, right knee TITLE OF PROCEDURE: Diagnostic operative arthroscopy, partial medial meniscectomy and synovectomy, right knee The patent was brought to the operating room, placed in the supine position after which he underwent general anesthesia. The right knee was then prepped and draped in the usual sterile fashion. The arthroscope was introduced through an anterolateral portal, interim portal created anteromedially. The suprapatellar pouch was inspected. The findings on the patella and the femoral groove were as noted above. An intra-articular shaver was introduced to debride the loose fibrillated articular cartilage from the medial patellar facet. The hypertrophic synovial scarring between the patella and the femoral groove was debrided. The hypertrophic impinging medial synovial plica was resected. The hypertrophic synovial scarring overlying the intercondylar notch and lateral compartment was debrided. The medial compartment was inspected. An upbiting basket was introduced to transect the base of the degenerative posterior horn flap tear. This was removed with a grasper. The meniscus was then further contoured and balanced with an intra-articular shaver, reprobed and found to be stable. The cruciate ligaments were probed, palpated and found to be intact. The lateral compartment was then inspected. The lateral meniscus was probed and found to be intact. The loose fibrillated articular cartilage along the lateral tibial plateau was debrided with the intra-articular shaver. The knee joint was then thoroughly irrigated with the arthroscope. The arthroscope was then removed. Skin portals were closed with 3-0 nylon sutures. A sterile dressing was applied. The patient was then awakened and sent to the recovery room in stable condition. What CPT and ICD-9-CM codes should be reported?
18. A 61 year-old gentleman with a history of a fall while intoxicated suffered a blow to the forehead and imaging revealed a posteriorly displaced odontoid fracture. The patient was taken into the Operating Room, and placed supine on the operating room table. Under mild sedation, the patient was placed in Gardner-Wells tongs and gentle axial traction under fluoroscopy was performed to gently try to reduce the fracture. It did reduce partially without any change in the neurologic examination. More manipulation would be necessary and it was decided to intubate and use fiberoptic technique. The anterior neck was prepped and draped and an incision was made in a skin crease overlying the C 4-C5 area. Using hand-held retractors, the ventral aspect of the spine was identified and the C2-C3 disk space was identified using lateral fluoroscopy. Using some pressure upon the ventral aspect of the C2 body, we were able to achieve a satisfactory reduction of the fracture. Under direct AP and lateral fluoroscopic guidance, a Kirschner wire was advanced into the C2 body through the fracture line and into the odontoid process. This was then drilled, and a 42 millimeter cannulated lag screw was advanced through the C2 body into the odontoid process.
19. Patient is having ongoing back and hip pain. The physician elects to perform a sacroiliac injection at an ambulatory surgery center. After sterile prep, the patient is placed prone and under fluoroscopic guidance; the needle is placed into the SI joint with a mixture of 20 mg of Celestone and Marcaine for pain relief.
20. Patient is seen in the hospital’s outpatient surgical area with a diagnosis of a displaced comminuted fracture of the lateral condyle, right elbow. An ORIF procedure was performed, which included the following techniques: An incision was made in the area of the lateral epicondyle. This was carried through subcutaneous tissue, and the fracture site was easily exposed. Inspection revealed the fragment to be rotated in two places about 90 degrees. It was possible to manually reduce this quite easily, and the manipulation resulted in an almost anatomic reduction. This was fixed with two pins driven across the humerus. The pins were cut off below skin level. The wound was closed with plain catgut subcutaneously and 5-0 nylon for the skin. Dressings and a long arm cast were applied.
21. 35-year-old female patient presents with acute onset of severe pain since October. Her workup has revealed evidence of disk herniation with loss of lordosis at the C5-C6. Intraoperative findings were consistent with two large fragments of free disk fragments in the foramen at C5-C6 on the right side. After general anesthesia, the patient was placed on the operative table in the supine position. All pressure points were cushioned and a transverse skin incision was fashioned under fluoroscopic guidance over the C5-C6 disc space. Dissection through the platysma eventually allowed for exposure of the anterior entrance to the vertebral body of C5 and C6 and retractors were inserted to maintain adequate exposure. The operating microscope was brought into the field. Caspar posts were placed and slight distraction allowed exposure. A complete discectomy was performed at C5-C6 by using endplate curets pituitary rongeurs and Kerrison rongeurs. The posterior longitudinal ligament was resected and beneath the posterior longitudinal ligament, two significant sized disc fragments were noted in the foramen at C5-C6. These were removed using pituitary and Decker instruments. The endplates were then decorticated so that they were parallel to each other and a midline keel was performed on AP and lateral fluoroscopy. A size #1 by 5 mm interbody Kineflex-C device was placed under fluoroscopic guidance. Satisfied with the positioning of the device, the decision was made to close.
22. A 17-year-old male presents to the emergency department after being involved in a car accident. The patient’s primary physician calls the orthopedic surgeon to the emergency department. The orthopedist diagnoses a sprained knee ligament. He places a long leg walking cast and instructs the patient to return to his office for follow-up care.
23. Patient complains of chronic/acute arm and shoulder pain following bilateral carpal tunnel surgery. Patient is followed by pain management for over a year. Physician finally diagnoses patient with reflex dystrophy syndrome (RSD). Physician performs six trigger point injections into four muscle groups.
24. A Grade I, high velocity open right femur shaft fracture was incurred when a 15-year-old female pedestrian was hit by a car. She was taken to the operating room within four hours of her injury for thorough irrigation and debridement, including excision of devitalized bone. The patient was then reprepped, redraped, and repositioned. Intramedullary rodding was then carried out with proximal and distal locking screws.
25. This 45-year-old male presents to the operating room with a painful mass of the right upper arm. General anesthesia was induced. Soft tissue dissection was carried down thru the proximal aspect of the teres minor muscle. Upon further dissection a large mass was noted just distal of the IGHL(inferior glenohumeral ligament), which appeared to be benign in nature. With blunt dissection and electrocautery, the 4.5 cm mass was removed en bloc and sent to pathology. The wound was irrigated, and repair of the teres minor with subcutaneous tissue was then closed with triple-0 Vicryl. Skin was closed with double-0 Prolene in a subcuticular fashion.