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PubMed Results

Items 1-24 of 24 (Display the 24 citations in PubMed)

1. **Patient with lupus anticoagulant caused aPTT prolongation corrected with prednisolone treatment and later anticoagulation treatment due to chronic atrial fibrillation**

Clin Case Rep. 2023 Jun 7;11(6):e7284. doi: 10.1002/ccr3.7284. eCollection 2023 Jun.

Authors

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- PMID: 37305887
- PMCID: PMC10248206
- DOI: 10.1002/ccr3.7284

Abstract

Key clinical message: Lupus anticoagulant caused aPTT prolongation in rare case can cause bleeding tendency especially when combined with other hemostasis abnormalities. In such cases, aPTT value can be corrected by immunosuppressants within several days of treatment. When anticoagulation therapy is needed vitamin K antagonist are a good option for the initial treatment.

Abstract: Lupus anticoagulant antibodies despite causing aPTT prolongation are commonly associated with increased risk of thrombosis. We present a rare case of patient when these autoantibodies resulted in dramatic aPTT prolongation and combined with associated thrombocytopenia resulted in minor bleeding events. In presented case treatment with oral steroids resulted in aPTT values correction followed by resolution of bleeding tendency within several days. Later, the patient developed chronic atrial fibrillation and was started on anticoagulation treatment initially with vitamin K antagonist without bleeding complications during follow-up period. Corresponding changes in patient's aPTT time in a course of whole treatment is presented.

Keywords: aPTT prolongation; bleeding; case report; lupus anticoagulant.

Conflict of interest statement

The authors confirm that this article content has no conflict of interest.

2. # Current and future treatment for alcoholic-related liver diseases

J Gastroenterol Hepatol. 2023 Jun 10. doi: 10.1111/jgh.16257. Online ahead of print.

Authors

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- PMID: 37300449
- DOI: 10.1111/jgh.16257

Abstract

The socioeconomic burden of alcohol-related liver disease has been increasing worldwide. Its prevalence is underestimated, and patients with alcohol-related liver disease are rarely diagnosed in the earlier phase of the disease spectrum. Alcoholic hepatitis is a distinct syndrome with life-threatening signs of systemic inflammation. In severe alcoholic hepatitis, prednisolone is indicated as the first-line treatment even with the possibility of various complications. Early liver transplantation can be another option for highly selected patients with a null response to prednisolone. Most importantly, abstinence is the mainstay of long-term care, but relapse is frequent among patients. Recent findings on the pathogenesis of alcoholic hepatitis have enabled us to discover new therapeutic targets. Preventing hepatic inflammation, reducing oxidative stress, improving gut dysbiosis, and enhancing liver regeneration are the main targets of emerging therapies. Herein, we review the pathogenesis, current treatment, and barriers to successful clinical trials of alcoholic hepatitis. Additionally, clinical trials for alcoholic hepatitis, either ongoing or recently completed, will be briefly introduced.

Keywords: alcoholic hepatitis; gut-liver axis; inflammation; prednisolone; regeneration.

- 64 references

3. Outcomes of pediatric deceased donor kidney transplant in northeast Thailand

Pediatr Transplant. 2023 Jun 9;e14411. doi: 10.1111/petr.14411. Online ahead of print.

Authors

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- PMID: 37294688
- DOI: 10.1111/petr.14411

Abstract

Background: Kidney transplantation (KT) is the best therapy in children with end-stage renal disease (ESRD), however, improving long-term graft survival remains challenging. The aim of this study was to determine graft survival and potential risk factors in pediatric patients who undergo deceased donor KT with a steroid-based regimen.

Methods: The medical records of children who underwent their first deceased donor KT in Srinagarind Hospital (Khon Kaen, Thailand) between 2001 and 2020 were reviewed.

Results: Seventy-two patients were studied. Male adolescents were the predominant recipients and the majority of donors were young adult males. Non-glomerular disease, particularly hypoplastic/dysplastic kidney disease, was the major cause of ESRD (48.61%). The mean cold ischemic time (CIT) was 18.29 ± 5.29 h. Most of the recipients had more than 4 human leukocyte antigen (HLA) mismatched loci with positive HLA-DR mismatch (52.78%). Induction therapy was administered in 76.74% of recipients. Tacrolimus plus mycophenolate sodium and prednisolone was the most common immunosuppressive maintenance regimen (69.44%). Graft failure occurred in 18 patients, mostly due to graft rejection (50%). Graft survival at 1, 3, and 5 years after KT were 94.40%, 86.25%, and 74.92%, respectively. The only significant risk factor of graft failure in this study was delayed graft function (DGF) (adjusted HR = 3.55; 95%CI: 1.14, 11.12; p = .029). Patient survival at 1, 3, and 5 years was 100%, 98.48%, and 96.19%, respectively.

Conclusion: The short-term outcomes of pediatric KT from deceased donors were satisfactory; however, prevention of DGF would result in better outcomes.

Keywords: children; chronic kidney disease; graft survival; renal transplantation; risk factor.

- 17 references

Full text links

4. # A survival case of visceral disseminated varicella zoster virus infection in a patient with systemic lupus erythematosus

BMC Nephrol. 2023 Jun 8;24(1):164. doi: 10.1186/s12882-023-03223-0.

Authors

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- PMID: 37291486
- PMCID: PMC10251651
- DOI: 10.1186/s12882-023-03223-0

Free PMC article

Abstract

Background: Visceral disseminated varicella zoster virus (VZV) infection is a rare but life-threatening complication in immunosuppressed patients. Herein, we report a survival case of visceral disseminated VZV infection in a patient with systemic lupus erythematosus (SLE).

Case presentation: A 37-year-old woman was diagnosed as SLE and initial induction therapy was started. Two months after starting the immunosuppressive therapy consisting of 40 mg of prednisolone (PSL) and 1500 mg of mycophenolate mofetil (MMF) daily, she suddenly developed strong abdominal pain, which was required opioid analgesics, followed by systemic skin blisters, which were diagnosed as varicella. Laboratory findings showed rapid exacerbation of severe liver failure, coagulation abnormalities and increased numbers of blood VZV deoxyribonucleic acid (DNA). Therefore, she was diagnosed as visceral disseminated VZV infection. Multidisciplinary treatment with acyclovir, immunoglobulin and antibiotics was started, the dose of PSL was reduced, and MMF was withdrawn. By their treatment, her symptoms were resolved and she finally discharged.

Conclusions: Our case highlights the importance of a clinical suspicion of visceral disseminated VZV infections, and the necessity of immediate administration of acyclovir and reduced doses of immunosuppressant to save patients with SLE.

Keywords: Abdominal pain; Mycophenolate mofetil (MMF); Skin blisters; Systemic lupus erythematosus (SLE); Varicella zoster virus.

Conflict of interest statement

The authors declare no competing interests.

- 30 references
- 3 figures

Full text links

5. **Safety of Low-Dose Oral Food Challenges for Hen's Eggs, Cow's Milk, and Wheat: Report from a General Hospital without Allergy Specialists in Japan**

Kobe J Med Sci. 2023 May 24;69(1):E16-E24.

Authors

Keita Nakanishi [1], Ikuo Okafuji [2], Takashi Kihara [2], Yukino Kawanami [1], Ayaka Shimizu [1], Shinpei Kotani [1], Yoshiaki Kamoi [1], Takahiro Okutani [1]

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- PMID: 37291068

Free article

Abstract

An oral food challenge (OFC) is useful for managing food allergies. However, because OFCs have the risk of severe allergic reactions, including anaphylaxis, conducting OFCs under this situation without allergy specialists is difficult. To investigate the safety of a low-dose OFC for eggs, milk, and wheat in a general hospital without allergy specialists. We retrospectively analyzed the medical records of children who were hospitalized in a general hospital without allergy specialists for a low-dose OFC of egg, milk, or wheat between April 2018 and March 2021. The records of 108 patients were evaluated. The median age was 15.8 months (range: 7.5-69.3 months). Challenged foods were eggs (n = 81), milk (n = 23), and wheat (n = 4). Fifty-three (49.0%) patients showed positive allergic reactions. Thirty-five (66.0%) patients showed grade 1 (mild), 18 (34.0%) showed grade 2 (moderate), and none showed grade 3 (severe) reactions. The interventions comprised antihistamines (n = 18), prednisolone (n = 3), inhaled B2-agonist (n = 2). No patients required adrenaline and no deaths occurred. Low-dose OFCs may be safe in a general hospital without allergy specialists. Conducting a low-dose OFC may be essential in food allergy practice.

Keywords: Anaphylaxis; Food allergy; Food hypersensitivity; Guidelines; Safety.

Full text links

6. # Prednisolone improves hippocampal regeneration after trimethyltin-induced neurodegeneration in association with prevention of T lymphocyte infiltration

Neuropathology. 2023 Jun 8. doi: 10.1111/neup.12926. Online ahead of print.

Authors

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- PMID: 37288771
- DOI: 10.1111/neup.12926

Abstract

The endogenous regenerative capacity of the brain is quite weak; however, a regenerative reaction, the production of new neurons (neurogenesis), has been reported to occur in brain lesions. In addition, leukocytes are well known to infiltrate brain lesions. Therefore, leukocytes would also have a link with regenerative neurogenesis; however, their role has not been fully elucidated. In this study, we investigated leukocyte infiltration and its influence on brain tissue regeneration in a trimethyltin (TMT)-injected mouse model of hippocampal regeneration. Immunohistochemically, CD3-positive T lymphocytes were found in the hippocampal lesion of TMT-injected mice. Prednisolone (PSL) treatment inhibited T lymphocyte infiltration and increased neuronal nuclei (NeuN)-positive mature neurons and doublecortin (DCX)-positive immature neurons in the hippocampus. Investigation of bromodeoxyuridine (BrdU)-labeled newborn cells revealed the percentage of BrdU/NeuN- and BrdU/DCX-positive cells increased by PSL treatment. These results indicate that infiltrated T lymphocytes prevent brain tissue regeneration by inhibiting hippocampal neurogenesis.

Keywords: hippocampus; lymphocyte; mouse; regeneration; trimethyltin.

- 51 references

Full text links

7. # Modified Two-Stage Approach for Management of Combined Rhegmatogenous Retinal Detachment and Choroidal Detachment With Extreme Hypotony

Cureus. 2023 May 6;15(5):e38653. doi: 10.7759/cureus.38653. eCollection 2023 May.

Authors

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- PMID: 37288240
- PMCID: PMC10242242
- DOI: 10.7759/cureus.38653

Free PMC article

Abstract

Combined rhegmatogenous retinal detachment (RRD) and serous choroidal detachment (CD) present a significant challenge. No global standard of care exists for treating these complex RRDs. There is a lower failure rate when such detachments are treated with pars plana vitrectomy than with scleral buckle alone. The use of pre-operative steroids may not work in cases with moderate-to-severe CDs with severe hypotony where suprachoroidal fluid drainage is required to reduce inflammatory mediators, thus preventing proliferative vitreoretinopathy (PVR). We report a case of a 62-year-old male who had a combined RRD and severe CD with vitreous hemorrhage in the left eye (LE). There was extreme hypotony leading to a severely deformed and distorted globe with poor visualization of the fundus. The patient was started on 60 mg of oral prednisolone, and a posterior subtenon injection of 20 mg of triamcinolone acetonide was given to reduce inflammation and CD. However, despite one week of pre-operative steroids, there was severe hypotony. The patient was taken for pars plana vitrectomy with drainage of suprachoroidal fluid. Intra-operatively even after drainage of suprachoroidal fluid via inferotemporal posterior sclerotomy, hypotony persisted, and media was very hazy, precluding us from proceeding with vitrectomy in the first sitting. Oral steroids were continued, and vitrectomy was done in the second sitting, 72 hours later, with long-term silicone oil tamponade. Post-operatively patient had a well-formed globe with an attached retina and a good visual acuity. Our case thereby highlights that combined retinal and CD is a complicated diagnosis that presents with many pre-operative, intra-operative, and post-operative challenges. We could achieve good anatomical and functional success using a modified two-stage approach in our unusual case of combined RRD wth CD with extreme hypotony.

Keywords: drainage of suprachoroidal fluid; hypotony; pars plana vitrectomy; rhegmatogenous retinal detachment with choroidal detachment; steroids.

Conflict of interest statement

The authors have declared that no competing interests exist.

- 13 references
- 2 figures

Full text links

8. # Anti-nuclear matrix protein 2 antibody-positive dermatomyositis with gastrointestinal ulcers: A case report

Int J Rheum Dis. 2023 Jun 7. doi: 10.1111/1756-185X.14755. Online ahead of print.

Authors

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- PMID: 37287416
- DOI: 10.1111/1756-185X.14755

Abstract

Gastrointestinal manifestations are a very rare complication of dermatomyositis (DM) and are much less frequent in adult cases than in juvenile cases. Only a few previous papers have reported adult patients who had DM with anti-nuclear matrix protein 2 (anti-NXP2) antibodies and who developed gastrointestinal ulcers. Herein, we report a similar case of a

50-year-old man who had DM with anti-NXP2 antibodies followed by relapsing multiple gastrointestinal ulcers. Even after the administration of prednisolone, his muscle weakness and myalgia deteriorated and gastrointestinal ulcers relapsed. In contrast, intravenous immunoglobulin and azathioprine improved his muscle weakness and gastrointestinal ulcers. Based on the parallel disease activity of the muscular and gastrointestinal symptoms, we considered that his gastrointestinal ulcers were a complication of DM with anti-NXP2 antibodies. We also propose that early intensive immunosuppressive therapy would be required for the muscular and gastrointestinal symptoms in DM with anti-NXP2 antibodies.

Keywords: anti-NXP2 antibody; dermatomyositis; extramuscular lesions; gastrointestinal ulcers.

- 9 references

Full text links

9. ## Granulocyte colony-stimulating factor with or without stem or progenitor cell or growth factors infusion for people with compensated or decompensated advanced chronic liver disease

Cochrane Database Syst Rev. 2023 Jun 6;6(6):CD013532. doi: 10.1002/14651858.CD013532.pub2.

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- PMID: 37278488
- PMCID: **PMC10243114** (available on 2024-06-06)
- DOI: 10.1002/14651858.CD013532.pub2

Abstract

Background: Advanced chronic liver disease is characterised by a long compensated phase followed by a rapidly progressive 'decompensated' phase, which is marked by the development of complications of portal hypertension and liver dysfunction. Advanced chronic liver disease is considered responsible for more than one million deaths annually worldwide. No treatment is available to specifically target fibrosis and cirrhosis; liver transplantation remains the only curative option. Researchers are investigating strategies to restore liver functionality to avoid or slow progression towards end-stage liver disease. Cytokine mobilisation of stem cells from the bone marrow to the liver could improve liver function. Granulocyte colony-stimulating factor (G-CSF) is a 175-amino-acid protein currently available for mobilisation of haematopoietic stem cells from the bone marrow. Multiple courses of G-CSF, with or without stem or progenitor cell or growth factors (erythropoietin or growth hormone) infusion, might be associated with accelerated hepatic regeneration, improved liver function, and survival.

Objectives: To evaluate the benefits and harms of G-CSF with or without stem or progenitor cell or growth factors (erythropoietin or growth hormone) infusion, compared with no intervention or placebo in people with compensated or decompensated advanced chronic liver disease.

Search methods: We searched the Cochrane Hepato-Biliary Group Controlled Trials Register, CENTRAL, MEDLINE, Embase, three other databases, and two trial registers (October 2022) together with reference-checking and web-searching to identify additional studies. We applied no restrictions on language and document type.

Selection criteria: We only included randomised clinical trials comparing G-CSF, independent of the schedule of administration, as a single treatment or combined with stem or progenitor cell infusion, or with other medical co-interventions, with no intervention or placebo, in adults with chronic compensated or decompensated advanced chronic liver disease or acute-on-chronic liver failure. We included trials irrespective of publication type, publication status, outcomes reported, or language.

Data collection and analysis: We followed standard Cochrane procedures. All-cause mortality, serious adverse events, and health-related quality of life were our primary

outcomes, and liver disease-related morbidity, non-serious adverse events, and no improvement of liver function scores were our secondary outcomes. We undertook meta-analyses, based on intention-to-treat, and presented results using risk ratios (RR) for dichotomous outcomes and the mean difference (MD) for continuous outcomes, with 95% confidence intervals (CI) and I^2 statistic values as a marker of heterogeneity. We assessed all outcomes at maximum follow-up. We determined the certainty of evidence using GRADE, evaluated the risk of small-study effects in regression analyses, and conducted subgroup and sensitivity analyses.

Main results: We included 20 trials (1419 participants; sample size ranged from 28 to 259), which lasted between 11 and 57 months. Nineteen trials included only participants with decompensated cirrhosis; in one trial, 30% had compensated cirrhosis. The included trials were conducted in Asia (15), Europe (four), and the USA (one). Not all trials provided data for our outcomes. All trials reported data allowing intention-to-treat analyses. The experimental intervention consisted of G-CSF alone or G-CSF plus any of the following: growth hormone, erythropoietin, N-acetyl cysteine, infusion of CD133-positive haemopoietic stem cells, or infusion of autologous bone marrow mononuclear cells. The control group consisted of no intervention in 15 trials and placebo (normal saline) in five trials. Standard medical therapy (antivirals, alcohol abstinence, nutrition, diuretics, β-blockers, selective intestinal decontamination, pentoxifylline, prednisolone, and other supportive measures depending on the clinical status and requirement) was administered equally to the trial groups. Very low-certainty evidence suggested a decrease in mortality with G-CSF, administered alone or in combination with any of the above, versus placebo (RR 0.53, 95% CI 0.38 to 0.72; I^2 = 75%; 1419 participants; 20 trials). Very low-certainty evidence suggested no difference in serious adverse events (G-CSF alone or in combination versus placebo: RR 1.03, 95% CI 0.66 to 1.61; I^2 = 66%; 315 participants; three trials). Eight trials, with 518 participants, reported no serious adverse events. Two trials, with 165 participants, used two components of the quality of life score for assessment, with ranges from 0 to 100, where higher scores indicate better quality of life, with a mean increase from baseline of the physical component summary of 20.7 (95% CI 17.4 to 24.0; very low-certainty evidence) and a mean increase from baseline of the mental component summary of 27.8 (95% CI 12.3 to 43.3; very low-certainty evidence). G-CSF, alone or in combination, suggested a beneficial effect on the proportion of participants who developed one or more liver disease-related complications (RR 0.40, 95% CI 0.17 to 0.92; I^2 = 62%; 195 participants; four trials; very low-certainty evidence). When we analysed the occurrences of single complications, there was no suggestion of a difference between G-CSF, alone or in combination, versus control, in participants in need of liver transplantation (RR 0.85, 95% CI 0.39 to 1.85; 692 participants; five trials), in the development of hepatorenal syndrome (RR 0.65, 95% CI 0.33 to 1.30; 520 participants; six trials), in the occurrence of variceal bleeding (RR 0.68, 95% CI 0.37 to 1.23; 614 participants; eight trials), and in the development of encephalopathy (RR 0.56, 95% CI 0.31 to 1.01; 605 participants; seven trials) (very low-certainty evidence). The same comparison suggested that G-CSF reduces the development of infections (including sepsis)

(RR 0.50, 95% CI 0.29 to 0.84; 583 participants; eight trials) and does not improve liver function scores (RR 0.67, 95% CI 0.53 to 0.86; 319 participants; two trials) (very low-certainty evidence).

Authors' conclusions: G-CSF, alone or in combination, seems to decrease mortality in people with decompensated advanced chronic liver disease of whatever aetiology and with or without acute-on-chronic liver failure, but the certainty of evidence is very low because of high risk of bias, inconsistency, and imprecision. The results of trials conducted in Asia and Europe were discrepant; this could not be explained by differences in participant selection, intervention, and outcome measurement. Data on serious adverse events and health-related quality of life were few and inconsistently reported. The evidence is also very uncertain regarding the occurrence of one or more liver disease-related complications. We lack high-quality, global randomised clinical trials assessing the effect of G-CSF on clinically relevant outcomes.

Conflict of interest statement

AC: has declared that they have no conflict of interest. MF: has declared that they have no conflict of interest. DP: has declared that they have no conflict of interest. GC: has declared that they have no conflict of interest.

Update of

- doi: 10.1002/14651858.CD013532

Full text links

10. ## Anthracycline-Free Protocol for Favorable-Risk Childhood ALL: A Noninferiority Comparison Between Malaysia-Singapore ALL 2003 and ALL 2010 Studies

J Clin Oncol. 2023 Jun 5;JCO2202347. doi: 10.1200/JCO.22.02347. Online ahead of print.

Authors

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- PMID: 37276496
- DOI: 10.1200/JCO.22.02347

Abstract

Purpose: To investigate whether, for children with favorable-risk B-cell precursor ALL (BCP-ALL), an anthracycline-free protocol is noninferior to a modified Berlin-Frankfurt-Muenster ALL-IC2002 protocol, which includes 120 mg/m^2 of anthracyclines.

Patients and methods: Three hundred sixty-nine children with favorable-risk BCP-ALL (age 1-9 years, no extramedullary disease, and no high-risk genetics) who cleared minimal residual disease (≤0.01%) at the end of remission induction were enrolled into Ma-Spore (MS) ALL trials. One hundred sixty-seven standard-risk (SR) patients (34% of Malaysia-Singapore ALL 2003 study [MS2003]) were treated with the MS2003-SR protocol and received 120 mg/m^2 of anthracyclines during delayed intensification while 202 patients (42% of MS2010) received an anthracycline-free successor protocol. The primary outcome was a noninferiority margin of 1.15 in 6-year event-free survival (EFS) between the MS2003-SR and MS2010-SR cohorts.

Results: The 6-year EFS of MS2003-SR and MS2010-SR (anthracycline-free) cohorts was 95.2% ± 1.7% and 96.5% ± 1.5%, respectively (*P* = .46). The corresponding 6-year overall survival was 97.6% and 99.0% ± 0.7% (*P* = .81), respectively. The cumulative incidence of relapse was 3.6% and 2.6%, respectively (*P* = .42). After adjustment for race, sex, age, presenting WBC, day 8 prednisolone response, and favorable genetic subgroups, the hazard ratio for MS2010-SR EFS was 0.98 (95% CI, 0.84 to 1.14; *P* = .79), confirming noninferiority. Compared with MS2003-SR, MS2010-SR had significantly lower episodes of bacteremia (30% *v* 45.6%; *P* = .04) and intensive care unit admissions (1.5% *v* 9.5%; *P* = .004).

Conclusion: In comparison with MS2003-SR, the anthracycline-free MS2010-SR protocol is not inferior and was less toxic as treatment for favorable-risk childhood BCP-ALL.

Trial registration: ClinicalTrials.gov NCT02894645.

Full text links

11. # Clinical, radiological, therapeutic and prognostic differences between MOG-seropositive and MOG-seronegative pediatric acute disseminated encephalomyelitis patients: a retrospective cohort study

Front Neurosci. 2023 May 19;17:1128422. doi: 10.3389/fnins.2023.1128422. eCollection 2023.

Authors

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- PMID: 37274199
- PMCID: PMC10235790
- DOI: 10.3389/fnins.2023.1128422

Free PMC article

Abstract

Objective: This study aimed to compare the clinical, radiological, therapeutic, and prognostic differences between pediatric patients showing acute disseminated encephalomyelitis (ADEM) with and without myelin oligodendrocyte glycoprotein (MOG) antibodies.

Methods: We retrospectively collected all available data of children diagnosed with ADEM and tested for serum MOG antibodies at the Children's Hospital of Chongqing Medical University from January 2017 to May 2021.

Results: A total of 62 patients were included in our cohort, of which 35 were MOG-seropositive and 27 were MOG-seronegative. MOG-seropositive ADEM children presented with significantly lower rates of seizures ($P = 0.038$) and cranial nerve (III-XII) palsy ($P = 0.003$). Isolated leukocytosis in the blood was more common in ADEM children with MOG antibodies ($P < 0.001$). The two groups showed no significant differences in the distributions and extent of the MRI lesions as well as the appearance of typical/atypical magnetic resonance imaging (MRI) features. MOG-seropositive children were more likely to relapse ($P = 0.017$) despite having slower oral prednisolone tapering after acute treatments ($P = 0.028$). In scoring performed on the basis of two neurological function scoring systems, MOG-seropositive children showed milder neurological disability status at onset ($P = 0.017$ and 0.025, respectively) but showed no difference during follow-up.

Conclusion: In summary, the differences in the clinical manifestations and auxiliary examination findings for MOG-seropositive and MOG-seronegative ADEM children lacked significance and specificity, making early identification difficult. MOG-seropositive children were more likely to relapse and showed slower steroid tapering. Moreover, MOG-seronegative children tended to have more severe neurological impairments at onset with no difference during follow-up.

Keywords: ADEM; MOG; acute disseminated encephalomyelitis; myelin oligodendrocyte glycoprotein; pediatric; prognosis.

Conflict of interest statement

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

- 40 references
- 2 figures

Full text links


12. # Evaluation of the effectiveness of oxytocin and enalapril in the prevention of epidural fibrosis developed after laminectomy in rats

Injury. 2023 Jul;54(7):110793. doi: 10.1016/j.injury.2023.05.024. Epub 2023 May 13.

Authors

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- PMID: 37211471
- DOI: 10.1016/j.injury.2023.05.024

Abstract

Introduction: Except for methylprednisolone, there is no current low-cost and low-side-effect drug/barrier method to prevent epidural fibrosis after spine surgery. However, the use of methylprednisolone has led to substantial controversy because of its serious side effects on wound healing. This study aimed to evaluate the effects of enalapril and oxytocin on preventing the development of epidural fibrosis in a rat laminectomy model.

Materials: Under sedation anesthesia, T9, T10, and T11 laminectomy was performed on 24 Wistar Albino male rats. The animals were then separated into four groups; Sham group (only laminectomy was performed; n = 6), MP group (laminectomy was performed and 10 mg/kg/day methylprednisolone was administered intraperitoneally (ip) for 14 days; n = 6), ELP group (laminectomy was performed and 0.75 mg/kg/day enalapril was administered ip for 14 days; n = 6), OXT group (laminectomy was performed and 160 µg/kg/day oxytocin was administered ip for 14 days; n = 6). Four weeks after the laminectomy, all the rats were

euthanised, and the spines were removed for histopathological, immunohistochemical, and biochemical examinations.

Results: Histopathological examinations revealed that the degree of epidural fibrosis (X^2=14.316, p = 0.003), collagen density (X^2=16.050, p = 0.001), and fibroblast density (X^2=17.500, p = 0.001) was higher in the Sham group and lower in the MP, ELP, and OXT groups. Immunohistochemical examinations showed that collagen type 1 immunoreactivity was higher in the Sham group and lower in the MP, ELP, and OXT groups (F = 54.950, p < 0.001). The highest level of α-smooth muscle actin immunoreactivity was seen in the Sham and OXT groups, and the lowest was in the MP and ELP groups (F = 33.357, p < 0.001). Biochemical analysis revealed that tissue levels of TNF-α, TGF-β, IL-6, CTGF, caspase-3, p-AMPK, pmTOR, and mTOR/pmTOR were higher in the Sham group and lower in MP, ELP, and OXT groups (p < 0.05). The GSH/GSSG levels were lower in the Sham group and higher in the other three groups (X^2=21.600, p < 0.001).

Conclusion: The study results showed that enalapril and oxytocin, which are known to have anti-inflammatory, antioxidant, anti-apoptotic, and autophagy-related regenerative properties, could reduce the development of epidural fibrosis after laminectomy in rats.

Keywords: Enalapril; Epidural; Fibrosis; Laminectomy; Methylprednisolone; Oxytocin.

Conflict of interest statement

Declaration of Competing Interest The authors declare that they have no conflict of interest. They also declare that they have not engaged in any financial relationship with any company whose product might be affected by the research described or with any company that makes or markets a competing product. Furthermore, there are no conflicts of interest in connection with this paper, and the material described is not under publication or consideration for publication elsewhere.

13. ## Case Report: Suspected Hyperacute Rejection During Living Kidney Transplantation

Transplant Proc. 2023 May;55(4):1089-1091. doi: 10.1016/j.transproceed.2023.04.020. Epub 2023 May 4.

Authors

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- PMID: 37149471
- DOI: 10.1016/j.transproceed.2023.04.020

Abstract

Background: We report a case of suspected hyperacute rejection during living kidney transplantation.

Case report: A 61-year-old man underwent kidney transplantation in November 2019. Before the transplantation, immunologic tests revealed the presence of anti-HLA antibodies but not donor-specific HLA antibodies. The patient was intravenously administered 500 mg of methylprednisolone (MP) and basiliximab before perioperative blood flow reperfusion. After blood flow restoration, the transplanted kidney turned bright red and then blue. Hyperacute rejection was suspected. After the intravenous administration of 500 mg of MP and 30 g of intravenous immunoglobulin, the transplanted kidney gradually changed from blue to bright red. The initial postoperative urine output was good. On the 22nd day after the renal transplantation, the patient was discharged with a serum creatinine level of 2.38 mg/dL, and the function of the transplanted kidney gradually improved.

Conclusions: In this study, non-HLA antibodies may have been a cause of the hyperacute rejection, which was managed with additional perioperative therapies.

Conflict of interest statement

Declaration of Competing Interest The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

14. ## Single centre experience of 120 patients with non-infectious aortitis: Clinical features, treatment and complications

Autoimmun Rev. 2023 Jul;22(7):103354. doi: 10.1016/j.autrev.2023.103354. Epub 2023 May 2.

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- PMID: 37142195
- DOI: 10.1016/j.autrev.2023.103354

Free article

Abstract

Background: Aortitis is an important form of vasculitis with significant risk of complications. Very few studies have provided detailed clinical phenotyping across the whole disease spectrum. Our primary aim was to look the clinical features, management strategies and complications associated with non-infectious aortitis.

Methods: A retrospective review was performed on patients with diagnosis of noninfectious aortitis at the Oxford University hospitals NHS Foundation Trust. Clinicopathologic features were recorded including demographics, presentation, aetiology, laboratory, imaging findings, histopathology, complications, treatment, and outcome.

Results: We report the data on 120 patients (59% females). Systemic inflammatory response syndrome constituted the most common presentation (47.5%). 10.8% were diagnosed following a vascular complication (dissection or aneurysm). All patients (n = 120) had raised inflammatory markers (median ESR 70.0 mm/h and CRP 68.0 mg/L). Isolated aortitis subgroup (15%) had significantly higher likelihood of presenting with vascular complications and challenging to diagnose due to non-specific symptoms. Prednisolone (91.5%) and methotrexate (89.8%) were the most used treatment. 48.3% developed vascular complications during the disease course including ischaemic complications (25%), aortic dilatation and aneurysms (29.2%) and dissection (4.2%). Risk of dissection was higher in the isolated aortitis subgroup at 16.6% compared to all other types of aortitis at 1.96%.

Conclusion: Risk of vascular complications is high in non-infectious aortitis patients during disease course, hence early diagnosis and appropriate management is key. DMARDs such as Methotrexate appear to be effective, nonetheless there remain gaps in evidence for longer-term management of relapsing disease. Dissection risk seems much higher for patients with isolated aortitis.

Keywords: Aortitis; Biological therapies; DMARDs; Large vessel vasculitis; Outcomes; PET CT scan.

Conflict of interest statement

Declaration of Competing Interest The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: Dr. Shirish Dubey reports a relationship with Boehringer Ingelheim GmbH that includes: consulting or advisory and speaking and lecture fees. Also, speaker fees from Janssen. Dr Andev has received honoraria from Novartis.

Full text links

15. # Efficacy of Oral Ivermectin as Empirical Prophylaxis for Strongyloidiasis in Patients Treated with High-Dose Corticosteroids: A Retrospective Cohort Study

Am J Trop Med Hyg. 2023 May 1;108(6):1183-1187. doi: 10.4269/ajtmh.22-0712. Print 2023 Jun 7.

Authors

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- PMID: 37127266
- DOI: 10.4269/ajtmh.22-0712

Abstract

People living in areas endemic for strongyloidiasis are at risk of latent Strongyloides stercoralis infection. Corticosteroid therapy is a well-established risk factor for life-threatening hyperinfection syndrome and disseminated disease owing to suppression of the immune system. There are limited data available on the efficacy and cost of providing oral ivermectin prophylaxis to all patients receiving high-dose corticosteroids for strongyloidiasis in endemic areas. We thus conducted this retrospective cohort study at Khon Kaen University's Srinagarind Hospital from 2015 to 2019. Inclusion criteria were as follows: age ≥ 18 years, having received ≥ 0.5 mg/kg/day of prednisolone or equivalent for at least 14 days, and hospitalization during the study period. A total of 250 patients were included in the study: 125 in the empirical prophylaxis group (prescribed ivermectin even if fecal examination results were negative or nonexistent) and the remaining patients in the definite therapy group (prescribed ivermectin only if S. stercoralis was detected by fecal examination). The prevalence of strongyloidiasis at enrollment estimated by fecal examination was 5.5%. Ivermectin was given to 125 patients (100%) in the prophylaxis group compared with 12 (9.6%) in the definite therapy group (P value < 0.001). During the 12-month follow-up period, S. stercoralis was detected in three patients, two in the prophylaxis

group and one in the definite therapy group (P value = 1.000). No cases of hyperinfection syndrome or disseminated disease were found. The empirical prophylaxis strategy had a significantly higher cost than the definite therapy strategy (563 versus 254, P value < 0.001) and did not demonstrate superior efficacy in strongyloidiasis prevention.

Full text links

16. ## Hallermann-Streiff Syndrome in Concordant Monozygotic Twins With Congenital Cataracts, Exudative Retinal Detachments, and One Case of Corneal Perforation Requiring Keratoplasty

Cornea. 2023 Jul 1;42(7):899-902. doi: 10.1097/ICO.0000000000003286. Epub 2023 Apr 21.

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- PMID: 37088900
- PMCID: **PMC10247501** (available on 2024-07-01)
- DOI: 10.1097/ICO.0000000000003286

Abstract

Purpose: We describe the management of Hallermann-Streiff syndrome in monozygotic female twins with congenital cataracts, exudative retinal detachments, and 1 case of corneal descemetocele with associated dellen and subsequent perforation.

Methods: This study was a case report and review of the literature.

Results: Twins 1 and 2 exhibited all 7 cardinal characteristics of Hallermann-Streiff syndrome, presenting with spontaneous lenticular resorption, anterior uveitis, and glaucoma. They underwent bilateral cataract extraction with near total capsulectomy. Both twins experienced recurrent glaucoma, for which twin 1 underwent successful endocyclophotocoagulation in both eyes and twin 2 in the left eye alone. The fellow eye developed 2 sites of perilimbal corneal descemetoceles with associated dellen at the inferotemporal limbal corneal junction leading to spontaneous perforation of 1 site, requiring a full-thickness corneal graft. Both twins developed recurrent bilateral exudative retinal detachments unresponsive to oral prednisolone. Twin 1's last best-corrected visual acuity with aphakic spectacles was 20/260 in the right eye and 20/130 in the left eye at age 4 years and 8 months. Twin 2's last best-corrected visual acuity was 20/130 in each eye at age 4 years and 11 months, over a year after right eye penetrating keratoplasty.

Conclusions: We describe 2 rare cases of Hallermann-Streiff syndrome in monozygotic twins complicated by corneal perforation requiring penetrating keratoplasty in 1 eye of 1 twin. Although corneal opacities have been described in this condition, this is the first case of corneal descemetocele in Hallermann-Streiff syndrome. The cornea was stabilized with a relatively favorable visual outcome over 1 year later.

Conflict of interest statement

The authors have no funding or conflicts of interest to disclose.

Full text links

17. ## A Case Report of a Kidney Transplant Recipient With Organizing Pneumonia After Graft Loss

Transplant Proc. 2023 May;55(4):1081-1083. doi: 10.1016/j.transproceed.2023.03.023. Epub 2023 Apr 15.

Authors

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- PMID: 37069010
- DOI: 10.1016/j.transproceed.2023.03.023

Abstract

We present a case of a 68-year-old male patient who underwent ABO-incompatible living kidney transplantation from his wife because of immunoglobulin A nephropathy 13 years ago. Over time, the patient showed a gradual decline in graft function and required reinitiation of hemodialysis because of fluid overload, which led to his admission to our hospital. An arteriovenous fistula was created, and subsequently, hemodialysis therapy was started. Because he had chronic cytomegalovirus retinopathy and thrombotic microangiopathy due to immunosuppressive therapy at admission, mycophenolate mofetil and tacrolimus were discontinued during hemodialysis initiation. Only low-dose prednisolone was continued. One week later, the patient had a fever, and chest computed tomography revealed bilateral pneumonia, which was not improved by antibiotics. The patient was diagnosed with organized pneumonia. After ruling out opportunistic infection, including pneumocystis pneumonia, increased doses of prednisolone resulted in the remission of organizing pneumonia.

18. # A clinical conundrum: Temporal bone metastases from lung adenocarcinoma

Am J Otolaryngol. 2023 Jul-Aug;44(4):103880. doi: 10.1016/j.amjoto.2023.103880. Epub 2023 Mar 28.

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- PMID: 37003029
- DOI: 10.1016/j.amjoto.2023.103880

Abstract

Background: Metastatic disease to the temporal bone is rare. Even more uncommonly, it can be the first manifestation of an underlying malignancy. Patients typically present late in the disease process with non-specific symptoms of hearing loss, facial nerve palsy and otorrhea.

Case: A 62-year-old Chinese female presented with right facial weakness, which had near-complete improvement in response to pulse prednisolone. On examination, she had a right temporal swelling and right mild-severe conductive hearing loss. A computed tomography scan showed a destructive lesion centred in the squamous temporal bone, with an associated soft tissue component. Positron emission tomography scan revealed bony and lung metastases, but no distinct hypermetabolic primary site. An incisional biopsy unexpectedly returned as metastatic lung adenocarcinoma.

Conclusion: Although rare, it is important for otolaryngologists to be aware of the insidious nature of temporal bone metastases and possible atypical clinical and radiological features, to facilitate timely workup and initiation of treatment.

Full text links

19. ## Presumptive hemophagocytic syndrome associated with co-infections with FIV, Toxoplasma gondii, and Candidatus mycoplasma haemominutum in an adult cat

Vet Clin Pathol. 2023 Jun;52(2):324-333. doi: 10.1111/vcp.13205. Epub 2023 Mar 28.

Authors

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- PMID: 36975170
- DOI: 10.1111/vcp.13205

Abstract

A 9-year-old neutered male cat, previously test-positive for feline immunodeficiency virus (FIV), was presented with an history of vomiting, hyporexia, and weight loss. Panleukopenia was identified on complete blood counts, and bone marrow evaluation revealed ineffective granulocytic hyperplasia and rare neutro-, erythro-, and rubriphagocytosis. Prednisolone was initiated with no response, and progression to pancytopenia occurred. On abdominal ultrasonographic examination, splenomegaly was present. PCR testing was positive for Candidatus Mycoplasma haemominutum and IgG antibodies against Toxoplasma gondii were detected (titer 1:2560). Treatment with antibiotics, feline recombinant interferon-ω, chlorambucil, mycophenolate, and raltegravir was implemented with no clinical improvement, and splenectomy was performed. Cytologic evaluation of splenic aspirates revealed exuberant neutro-, erythro-, and rubriphagocytosis. Histopathology of the spleen also showed many erythrophagocytic macrophages with no evidence of malignancy, and a diagnosis of hemophagocytic syndrome (HS) was made. The WBC count and hematocrit reached reference values 1 day and 3 months, respectively, after splenectomy. The cat was treated with cyclosporine and lomustine. Disease progression led to the development of septic hepatitis, and the cat was euthanized. To our knowledge, this is the first case of presumptive HS in cats that might have been associated with FIV, Toxoplasma gondii, and Candidatus Mycoplasma haemominutum co-infection.

Keywords: Toxoplasma; feline immunodeficiency virus; hemophagocytic syndrome; mycoplasma; pancytopenia; splenomegaly.

- 31 references

Full text links

20. # Real-world clinical characterization, healthcare resource utilization and productivity loss in chronic graft versus host patients exposed to extracorporeal photopheresis in Sweden

Transfus Apher Sci. 2023 Jun;62(3):103705. doi: 10.1016/j.transci.2023.103705. Epub 2023 Mar 21.

Authors

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- PMID: 36967367
- DOI: 10.1016/j.transci.2023.103705

Free article

Abstract

Background: Extracorporeal photopheresis (ECP) is frequently used to treat moderate-severe chronic graft versus host disease (cGVHD), however limited data exists describing ECP treatment effects on healthcare and societal costs. We aimed to characterize clinical and health economic outcomes and productivity loss in cGVHD patients exposed to ECP.

Methods: We identified 2708 patients aged ≥ 18 years with a record of allogeneic hematopoietic stem cell transplantation (HSCT) in the Swedish Patient Register between 2006 and 2020. Patients exposed to ECP from 3-months post HSCT (index) were included (n= 183). Data was linked to the Prescribed Drug Register, the Cause of Death Register, and the Longitudinal Integrated Database for Health Insurance and Labor Market Studies (LISA).

Results: The median patient age at index was 51 years (IQR1-3; 38-61). In the 3-month period before ECP initiation compared to 9-12 months post-ECP, the cumulative three-month dose per patient decreased prednisolone/prednisone (1,381 mg vs. 658 mg, $p < 0.001$) and cyclosporin (12,242 mg vs. 3,501 mg, $p < 0.001$). Infection incidence also decreased over the same period (79.2% vs 59.1%, $p < 0.001$). Time spent in healthcare decreased from 68.9% to 22.1% from the first and fifth follow-up year respectively, and corresponding annual healthcare cost reduced from €27,719 to €1,981. Among patients < 66 years of age, sickness-related workplace absence decreased from 73.2% to 31.9% between the first and fifth follow-up year, with median annual productivity loss decreasing from €20,358 to €7,211 per patient.

Conclusions: ECP was associated with reduced use of corticosteroids, immunosuppressive agents, and fewer infections. Furthermore, cost and healthcare utilization decreased over time.

Keywords: Chronic graft versus host disease; Extracorporeal photopheresis; Healthcare resource utilization; Hematopoietic stem cell transplantation; Population-based registry.

Conflict of interest statement

Declaration of Competing Interest Frida Schain is an employee and own stocks in Schain Research AB. Christina Jones in an employee of Schain Research AB. Constance Boissin, Tamas Laczik and Stefano Fedeli have been interns at Schain Research AB and have received payments for analytical work. Schain Research AB has received payment from Mallinckrodt for work related to the study. Mats Remberger, Ola Blennow, Josefina Dykes, and Torsten

Eich have no competing interests(.) Jonas Mattsson has received lecture honorarium from Mallinckrodt. Gösta Berlin has received lecture honorariums from Mallinckrodt.

Full text links

21. ## Persistent marked cerebrospinal fluid eosinophilia in a dog with primary central nervous system histiocytic sarcoma

Vet Clin Pathol. 2023 Jun;52(2):346-352. doi: 10.1111/vcp.13183. Epub 2022 Dec 12.

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- PMID: 36504314
- DOI: 10.1111/vcp.13183

Abstract

A 6-year-old female spayed Jack Russell Terrier was evaluated for episodic seizure-like activity and intermittent obtundation over the previous 3 weeks. Magnetic resonance imaging (MRI) of the brain revealed mild generalized dilation of the ventricular system with periventricular edema. A focal area of mildly increased lepto- and pachymeningeal contrast uptake in the region of the right parietal and occipital lobes was observed. Analysis of cerebrospinal fluid (CSF) revealed marked mixed pleocytosis with 20% eosinophils and no atypical cells or microorganisms. The dog transiently improved with prednisolone for

suspected eosinophilic meningoencephalitis/meningoencephalomyelitis of unknown origin (MUO) but worsened over the following 5 months. Brain MRI and CSF sampling were repeated. Additional multifocal lesions were evident in the brainstem and cerebellum. On CSF analysis, the eosinophilic pleocytosis and increased total protein persisted. The clinical signs progressed despite treatment, and the patient was euthanized 6 weeks later. A post-mortem examination was performed. Histopathology and immunohistochemistry revealed a multifocal neoplastic proliferation of cells in the brain, diffusely and strongly positive for ionized calcium-binding adapter molecule (Iba-1) and negative for AE1/AE3 pan-cytokeratin and glial-fibrillar-acid-protein (GFAP) immunostaining, consistent with a diagnosis of histiocytic sarcoma (HS). No other organic lesions were found; therefore, the neoplasm was considered a primary HS of the central nervous system (CNS). This case report stresses the importance of considering primary CNS HS in the differential diagnosis of dogs with marked CSF eosinophilia, even in the absence of atypical cells on cytologic examination.

Keywords: CSF; brain neoplasia; eosinophils.

- 18 references

Full text links

22. ## Hemophagocytic syndrome in a cat with immune-mediated hemolytic anemia

Vet Clin Pathol. 2023 Jun;52(2):313-319. doi: 10.1111/vcp.13176. Epub 2022 Nov 18.

Authors

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- PMID: 36398679
- DOI: 10.1111/vcp.13176

Abstract

A 10-year-old spayed female domestic short-haired cat presented with depression, anorexia, and tachypnea. A complete blood count revealed moderate regenerative anemia, severe leukopenia, and mild thrombocytopenia. Antibodies against feline immunodeficiency virus (FIV) were also detected. Abdominal radiography and ultrasonography revealed severe splenomegaly. Cytologic evaluation of the spleen revealed macrophagic infiltration with hemophagocytosis. Bone marrow aspiration revealed erythroid hyperplasia with no other abnormalities. A presumptive diagnosis of hemophagocytic syndrome secondary to immune-mediated hemolytic anemia was made based on a positive direct Coombs test result. Blood transfusion, prednisolone, and immunosuppressive treatments were performed; however, the blood abnormalities did not improve. The cat was then administered prednisolone and chlorambucil, followed by splenectomy. Leukopenia immediately recovered, and packed cell volume increased slightly. However, the blood abnormalities recurred, and the cat died. To the best of our knowledge, this is the first report of hemophagocytic syndrome secondary to immune-mediated disease in an FIV-positive cat.

Keywords: feline; feline immunodeficiency virus; hemophagocytosis; splenectomy.

- 32 references

Full text links

23. **Eosinophilic granulomatosis with polyangiitis as a rare cause of the syndrome of inappropriate antidiuretic hormone secretion**

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Abstract

Eosinophilic granulomatosis with polyangiitis (EGPA, Churg-Strauss syndrome) is a rare multisystem necrotizing vasculitis that involves small- to medium-sized blood vessels. We report a rare case of syndrome of the inappropriate antidiuretic hormone (ADH) secretion (SIADH) secondary to EGPA. A 53-year-old man applied with complaints of pain in the large joints and morning stiffness in knee for 2 months. The patient had the history of impaired fasting glucose, asthma, nasal polyps, and urticaria. Physical examination revealed intrinsic muscle atrophy and weakness in the right hand. Peripheral eosinophil count was 9.78 × 109/L (0.02-0.5), erythrocyte sedimentation rate 39 mm/h (0-20), and C-reactive protein 5.77 mg/dL (0-0.5). Migratory ground-glass pulmonary opacities had been reported in previous chest computed tomography scans. Echocardiography revealed findings compatible with eosinophilic involvement. Electroneuromyographic evaluation showed acute distal axonal neuropathy of right ulnar nerve. EGPA was considered. Oral methylprednisolone treatment was initiated. Intravenous immunoglobulin (IVIG) and cyclophosphamide treatment and gradual tapering of oral steroids were planned. In 24-h urine analysis, sodium was 387 mEq, creatinine was 1156 mg, and volume was 3000 mL. When his medical records were investigated, it was observed that hyponatremia was present for nearly 2 years. While serum osmolality was 270, urine osmolality was 604 mOsm/kg H_2O. So, SIADH diagnosis was made. Fluid intake was restricted. Although the patient's sodium level did not return to normal, it rose up to 130 mEq/L. After second cycle of EGPA treatment (cyclophosphamide and IVIG), serum sodium was normal. There is only four other documented cases of SIADH associated with EGPA. We hypothesized that blood supply to the hypothalamus and/or posterior hypophysis might be affected from EGPA vasculitis. Here, in this case, with effective treatment of EGPA, SIADH was resolved which implies a causality between two conditions.

Keywords: Churg-Strauss syndrome; Eosinophilic granulomatosis with polyangiitis (EGPA); Hyponatremia; The syndrome of inappropriate antidiuretic hormone secretion (SIADH).

- 22 references

Full text links

24. Androgen receptor mutations modulate activation by 11-oxygenated androgens and glucocorticoids

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Abstract

Background: Androgen receptor (AR) ligand-binding domain (LBD) mutations occur in ~20% of all castration-resistant prostate cancer (CRPC) patients. These mutations confer ligand promiscuity, but the affinity for many steroid hormone pathway intermediates is unknown. In this study, we investigated the stimulation of clinically relevant AR-LBD mutants by endogenous and exogenous steroid hormones present in CRPC patients to unravel their potential contribution to AR pathway reactivation.

Methods: A meta-analysis of studies reporting untargeted analysis of AR mutants was performed to identify clinically relevant AR-LBD mutations. Using luciferase reporter and quantitative fluorescent microscopy, these AR mutants were screened for sensitivity for various endogenous steroids and synthetic glucocorticoids used in the treatment of CRPC.

Results: The meta-analysis revealed that AR_{L702H} (3.4%), AR_{H875Y} (4.9%), and AR_{T878A} (4.4%) were the most prevalent AR-LBD mutations across 1614 CRPC patients from 21 unique studies. Testosterone (EC50: 0.22 nmol/L) and 11-ketotestosterone (11KT, EC50: 0.74 nmol/L) displayed subnanomolar affinity for AR_{WT}. The p.H875Y mutation selectively increased sensitivity of the AR for 11KT (EC50: 0.15 nmol/L, $p < 0.05$ vs AR_{WT}), whereas p.L702H decreased sensitivity for 11KT by almost 50-fold. While cortisol and prednisolone both stimulate AR_{L702H}, dexamethasone importantly does not.

Conclusion: Both testosterone and 11KT effectively contribute to AR_{WT} activation, while selective sensitization positions 11KT as a more prominent activator of AR_{H875Y}. Dexamethasone may be a suitable alternative to prednisolone and should be explored in patients bearing the AR_{L702H}.

- Cited by 2 articles
- 47 references

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