

Research media watch

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1. Is emotional lability a marker for attention deficit hyperactivity disorder, anxiety and aggression symptoms in preschoolers?

Maire, Jenna, Galéra, Cédric, Meyer, Eric, Salla, Julie, Michel, Grégory, *Child & Adolescent Mental Health*, 1475357X, May2017, Vol. 22, Issue 2

Background: Emotional lability (EL) is frequent in school-aged children with attention deficit hyperactivity disorder (ADHD) and is associated with more frequent comorbidities and more severe impairment. However, little research has investigated the association between EL, ADHD and comorbid symptoms in preschoolers. This study assessed dimensional EL in preschoolers and its link with ADHD symptoms (e.g. hyperactivity-impulsivity and inattention) and behavioural and emotional problems (e.g. aggression and anxiety). **Method:** One hundred and fifty-four preschoolers aged 3–6 years old were rated on questionnaires by parents. EL was assessed with the index from the Conners Rating Scale-Revised and behavioural and emotional problems with an adapted version of the Social Behavior Questionnaire. Multiple linear regressions analyses were conducted. **Results:** Higher EL was associated with higher hyperactivity-impulsivity, inattention, anxiety and aggression problems. After controlling for other behavioural and emotional problems and sociodemographic variables, EL remained associated with hyperactivity-impulsivity and anxiety. **Conclusions:** Emotional lability seems to be a potential marker for ADHD symptoms with internalizing problems in preschoolers and could be a target for diagnosis and early interventions. This finding should be treated with caution as the study was limited by the low response rate of the participants and consequently the small sample size.

Preschool children; emotional lability; attention deficit hyperactivity disorder; anxiety; aggression

Key Practitioner Message: Research has shown that emotional lability is associated with attention deficit hyperactivity disorder, anxiety disorder and conduct disorder symptoms in childhood and beyond. Currently, little is known about its association in early childhood.

This study found that emotional lability was significantly associated with hyperactivity-impulsivity and anxiety in preschoolers. Emotional lability has a transnosographic aspect across both internalizing and externalizing psychopathology. It seems to be a key feature in diagnostic practice and a potential marker that could be a target for early interventions aiming to offset the risk of harmful developmental trajectories.

Comments: ADHD is a grey area of diagnosis in India, mostly die to lack of trained personnels and social infrastructure. Emotional lability is important factor which can predict social and psychological crimes in adolescent ages.

2. HPV vaccination recommendation practices among adolescent health care providers in five countries

Authors: Topazian HM; Kundu D; Peebles K; Ramos S; Morgan K; Kim CJ; Richter KL; Brewer NT; Peris M; Smith JS; Electronic address: jennifers@unc.edu.

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Keywords: *HPV-associated cancers; cervical cancer; healthcare provider recommendation; human papilloma virus; vaccination*

Study Objective: To assess adolescent health care providers' recommendations for, and attitudes towards HPV vaccination in five countries.

Design: In-depth interviews of adolescent health care providers, 2013-2014. Setting: Five countries where HPV vaccination is at various stages of implementation into national programs: Argentina, Malaysia, South Africa, South Korea, and Spain.

Participants: Adolescent health care providers (N=151) who had administered or overseen provision of adolescent vaccinations.

Main Outcome Measures: Frequency of HPV vaccination recommendation, reasons providers do not always recommend the vaccine and facilitators to doing so, comfort level with recommending the vaccine, reasons for any discomfort, and positive and negative aspects of HPV vaccination. Results: Over half of providers (54%) recommend HPV vaccination always or most of the time (range: 20% Malaysia to 90% Argentina). Most providers (74%) said they were comfortable recommending HPV vaccination, although South Korea was an outlier (33%). Providers cited protection against cervical cancer (83%) and genital warts (37%) as benefits of HPV vaccination. When asked about the problems with HPV vaccination, providers mentioned high cost (50% overall, range: 26% South Africa to 77% South Korea) and vaccination safety (19%, range: 7% South Africa to 33% Spain). Free, low-cost, or publicly available vaccination (39%) and additional data on vaccination safety (34%) and efficacy (28%) were the most commonly cited facilitators of health provider vaccination recommendation. Conclusion: Interventions to increase HPV vaccination should consider a country's specific provider concerns, such as reducing cost and providing information on vaccination safety and efficacy.

Comments: HPV vaccine cost is quite high in India, so also the dosing recommendations are different in different countries and manufacture dependant. Unless, proper guidelines are framed, vaccine will not be delivered to needy. At least, high risk population should be covered within India for evidence based recommendations.

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3. Hematologic Considerations and Management of Adolescent Girls with Heavy Menstrual Bleeding and Anemia in U.S. Children's Hospitals.

Authors: Powers JM ,Srivaths L; Haamid FW; O'Brien SH;

Source: Journal Of Pediatric And Adolescent Gynecology[J Pediatr Adolesc Gynecol] 2018 Jun 22.
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Publication Type:Journal Article Language: English Journal Info: Publisher: Elsevier Science Country of Publication: United States NLM ID: 9610774 Publication Model: Print-Electronic Cited Medium: Internet ISSN: 1873-4332 (Electronic) Linking ISSN: 10833188 NLM ISO Abbreviation: J Pediatr Adolesc Gynecol

Study Objective: To assess the frequency, severity, and inpatient management of girls admitted with heavy menstrual bleeding and iron deficiency anemia at U.S. children's hospitals, with a focus on hematologic considerations.

Design: Retrospective multicenter cohort study from October 2012 through September 2015. Setting: Children's hospitals submitting data to the Pediatric Health Information System. Participants: Females, age 8 to 18 years, admitted with both heavy menstrual bleeding and anemia as either a primary or secondary diagnosis. Patients with cancer, immune thrombocytopenic purpura, aplastic anemia, and pregnancy were excluded.

Main Outcome Measure(s): Hemostatic evaluation; provision of iron therapy RESULTS: We identified 1183 admissions (1134 unique patients). Patients' median (interquartile range) age was 14 (11 to 17) years. Forty-one percent were Caucasian, 31% African American, and 26% Hispanic ethnicity. Intensive care utilization occurred in 5% (n=56) of admissions. Hemostatic assessment was inconsistent; 15% (n=182) had no such evaluation. Two-thirds (n=797, 67%) involved transfusions, 37% (n=433) received no inpatient iron therapy, and 17% (n=197) received no hormonal or anti-fibrinolytic therapy. Hemostatic evaluation was associated with intensive care utilization, OR 4.80 (1.16, 19.86; p=0.03); emergency department visit, OR 2.60 (1.86, 3.65; p<0.01); private insurance, OR 1.62 (1.12, 2.35; p=0.01); and younger age, OR 0.84 (0.77, 0.92; p<0.01).

Conclusions: Hundreds of girls with heavy menstrual bleeding and anemia are hospitalized at U.S. children's hospitals each year with variable inpatient hematologic evaluation and management. Future guidelines should emphasize early identification of at risk patients and promote effective implementation strategies to reduce the burden of this preventable complication.

Comments: Anemia is a major preventable health problem of the developing country like India. Along with nutrition , various cultural practices ,heavy menstrual period is an additional factor which can aggravate this condition .Due to improper health education and unavailability of proper health services this problem go unnoticed .It is a need to educate and treat the condition to prevent the morbidity and mortality.

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4. Outcome Analysis of Ventriculoperitoneal Shunt Surgery in Pediatric Hydrocephalus.

Authors: Pan, Pradyumna **Source:** Journal of Pediatric Neurosciences; Apr-Jun2018, Vol. 13 Issue 2, p176-181, 6p **Publication Year:** 2018

Author-Supplied Keywords: Complications, hydrocephalus, ventriculoperitoneal shunt

Abstract: **Aim:** To study the clinical outcome of shunt surgeries in children with hydrocephalus and evaluate the risk factors for ventriculoperitoneal (VP) shunt failure. **Materials and Methods:** Patients who underwent VP shunt surgery for hydrocephalus were included. Medical charts, operative reports, imaging studies, and clinical follow-up evaluations were reviewed and analyzed retrospectively. **Results:** A total of 137 patients with the average age of 20.7 months, range from 1.5 months to 8.5 years at the time of VP shunt surgery were included. The incidence of overall shunt complications was 35.76%; incidence of shunt revision was 27%, shunt blockade 45.94%, shunt infection 16.21%, shunt migration 10.81%, and shunt malfunction due to abdominal pseudocyst 10.81%. The mortality rate was 5.10%. The shunt revisions in the first 6 months after shunt placement was observed in n = 9 (24%). Hydrocephalus was associated with post-tubercular meningitis and intraventricular hemorrhage (IVH) in shunt placement was associated with multiple shunt revisions (n = 13, 35.13%) (n = 5, 45.4%), respectively. **Conclusion:** The findings of this study indicate that etiology of hydrocephalus, were associated with the shunt survival. Further prospective controlled studies are required to address the observed associations [ABSTRACT FROM AUTHOR]

Comments: Hydrocephalous is the one of the important cause of large head with various causative agents. It dose requires revision on regular basis as the child grow. But the long-term outcome will depend upon the underline cause. The incidence of shunt revision and blockage seems to be high in this study probably due to infectious etiology which is common in our country.

5. IV Levetiracetam versus IV Phenytoin in Childhood Seizures: A Randomized Controlled Trial.

Authors: Singh Kanika, Aggarwal, Anju, Faridi, M. M. A., Sharma, Sangeeta

Source: Journal of Pediatric Neurosciences; Apr-Jun2018, Vol. 13 Issue 2, p158-164, 7p

Publication Year:2018

Author-Supplied Keywords: Children drug levels, levetiracetam, phenytoin, seizures

Objectives: To compare the efficacy of IV phenytoin and IV levetiracetam in acute seizures. Design: Randomized controlled trial. Setting: Tertiary care hospital, November 2012 to April 2014. Patients: 100 children aged 3--12 yrs of age presenting with acute seizures. Intervention: Participants randomly received either IV phenytoin 20 mg/kg (n = 50) or IV levetiracetam 30 mg/kg (n = 50). Patients who were had seizures at presentation received IV diazepam prior to these drugs. Outcome Measures: Primary: Absence of seizure activity within next 24 hrs. Secondary: Stopping of clinical seizure activity within 20 mins of first intervention, change in cardio respiratory parameters, and achievement of therapeutic drug levels. Results: Two groups were comparable in patient characteristics and seizure type ($P > 0.05$). Of the 100 children, 3 in levetiracetam and 2 in phenytoin group had a repeat seizure in 24 hrs, efficacy was comparable (94% vs 96%, $P > 0.05$). Of these, 18 (36%) in phenytoin and 12 (24%) in levetiracetam group received diazepam. Sedation time was 178.80 ± 97.534 mins in phenytoin and 145.50 ± 105.208 mins in levetiracetam group ($P = 0.346$). Changes in cardio respiratory parameters were similar in both groups except a lower diastolic blood pressure with phenytoin ($P = 0.023$). Therapeutic drug levels were achieved in 38 (76%) children both at 4 and 24 hrs with phenytoin, compared to 50 (100%) and 48 (98%) at 1 and 24 hrs with levetiracetam ($P < 0.05$). Conclusion: Intravenous levetiracetam and phenytoin have similar efficacy in preventing seizure recurrences for 24 hrs in children 3--12 years presenting with acute seizures. [ABSTRACT FROM AUTHOR]

Comments: The management of seizure is changing with arrival of new anti epileptics, LEV has few known adverse effects, including a low risk of sedation, cardiorespiratory depression, or coagulopathy, and thus is potentially useful in critically ill pediatric patients. LEV considered to have a good adverse effect profile in comparison with both older anticonvulsants and some newer anticonvulsants. In this study, IV diazepam was given prior to LEV or Phenytoin. However, new recommendations are in favour of midazolam which has better safety profile than diazepam.