Consultant's Corner

Practical Answers To Your Everyday Questions

Parasite Testing for Patients with Bruxism

1.

My patients with bruxism are asking to be tested for parasites. Does this make any sense?

Question submitted by:
Dr. Svitlana Lukin
Thornhill, Ontario

Bruxism is defined as the habitual grinding of teeth, typically occurring during sleep; although, symptomatic episodes may occur unconsciously while awake. Chronic disease may result in the erosion of dentition, temporomandibular joint (TMJ) discomfort, and headaches. Psychological factors have been most commonly associated with this condition, although a number of other potential etiologies have been proposed, including nutritional deficiencies, endocrine disturbances, and allergies, as well as parasitic infection.[1] Hypotheses related to the pathogenesis of bruxism by parasitic infections encompass the physiological effects related to the production of nonspecific protein metabolites.[1]

Although some pediatric data exist suggesting the association of parasitic infection as a precipitant of this condition, no robust evidence-based relationship has been established to date.[1,2] As such, universal testing of the patient with bruxism is not supported by the current literature.

References
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Answered by:
Dr. Ted Xenodemetropoulos

What is the Suggested Circumcision Age for Phimosis?

2.

At what age would you suggest circumcision for asymptomatic phimosis?

Question submitted by:
Dr. Adriana Botha
Morden, Manitoba

An important part of deciding when to operate for phimosis is making an accurate diagnosis. The foreskin of male infants is normally non-retractile, and it is recommended that parents do not attempt to retract the foreskin of an infant. Physiological phimosis resolves spontaneously but at quite a variable rate, and it is difficult to set an age by which the foreskin would normally be retractile. If phimosis is indeed asymptomatic and not associated with symptoms, such as obstruction or discomfort while urinating, then there is no urgency in performing a circumcision. In the case of symptomic phimosis, options, such as topical betamethasone or stretching exercises are often successful and can be explored before surgery is considered.

Answered by:
Dr. Michael Rieder

Varenicline and Suicidal Ideation: How Common Is It?

3.

Varenicline and suicidal ideation: How common is it and should patients be warned about the side effects?

Question submitted by:
Dr. Tom Echlin
Windsor, Ontario

In Canada, varenicline is currently indicated for smoking cessation in conjunction with counselling.[1] There have been numerous reports of increased suicidal ideation in patients taking varenicline, and in patients that are quitting smoking. This has resulted in the Health Canada Advisory warning healthcare providers about the increased risk of serious neuropsychiatric adverse events in those patients taking varenicline. Specifically, depressed mood, agitation, hostility, changes in behaviour, suicidal ideation and suicide, as well as worsening of pre-existing psychiatric illness have been observed.[2] This scenario is very reminiscent for me of the mid 1980's when fluoxetine was first launched in the USA.

Health Canada reports that between April 2007 and April 30, 2008, a total of 226 Canadian cases of all cause neuropsychiatric adverse events were reported out of a total of 708,534 prescriptions filled.[2] At least seven of these Canadian cases reported between April and November of 2007 involved suicidal ideation.[3] Unfortunately, there is no clear Canadian data on how common suicidal ideation specifically is, since such rates are reliant upon voluntary reporting.[2] However, there have been studies in the literature that have examined the frequency of suicidal ideation in patients taking varenicline. An analysis of pooled data from ten smoking cessation trials completed by December 2008 found that there were no incidences of suicidal ideation or suicide attempts in the varenicline group compared to two events (0.1%) observed in the placebo group.[1] Additionally, a study from the United Kingdom found no increase in suicidal ideation in a cohort of > 80,000 smokers taking varenicline compared with those using other smoking cessation products.[4, 5]

When evaluating the cases of increased risk of suicidal ideation associated with varenicline, it is important to take into consideration a variety of potentially confounding factors that may have contributed to such reports. Varenicline has some inherent antidepressant properties, which may be linked to neuropsychiatric effects, but we would not hesitate to judiciously use an antidepressant in a suicidal depressed patient over the age of 25. We need to ask who is more likely to smoke, as these patients are more prone to neuropsychiatric symptoms, given that smoking offers a form of self-medication, albeit harmful.

Effects of partial or complete nicotine withdrawal while taking varenicline may inherently be associated with some of the neuropsychiatric symptoms reported. I also believe there is a grief reaction associated with smoking cessation and other potential contributing factors for suicidality, which include concurrent or past psychiatric conditions, as well as the concomitant use of other CNS acting medications and/or alcohol or substance use/misuse.[2]

However, there have been reported cases where such confounding factors did not appear to be present (*e.g.*, cases where suicidal ideation occurred within the first week of therapy and prior to smoking cessation). Therefore, it is essential that all patients be educated about the need to monitor for the development of suicidal ideation. Patients should be counseled to stop taking varenicline and contact their physician immediately if they do develop suicidal ideation or behaviour while on varenicline. If the patient has a history of psychiatric conditions or symptoms (even if stable and well-controlled), they should be carefully monitored throughout varenicline therapy. If suicidal ideation or any other neuropsychiatric symptom is experienced while on varenicline, it is prudent to report such adverse events to Health Canada and the manufacturer for further assessment and evaluation.[2]

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Answered by:
Dr. Joel Lamoure
Professor Jessica Stovel

Treatments for Glossodynia

4. Are there any good treatments for glossodynia?

Question submitted by:
Dr. C. Lynde
Markham, Ontario

Glossodynia, also referred to as burning tongue or burning mouth syndrome (BMS), is a condition characterized by a tingling or burning sensation on the lips, tongue, or entire mouth.

This condition appears more often in women than it does in men. Pain is typically low in the morning and increases over the course of the day.

Typically, there are no changes in the colour of the oral mucosa, presenting a challenege in the diagnosis of this condition.

Possible causes include:

- Type 2 diabetes
- Nutritional deficiencies
- Chronic depression or anxiety
- Menopause
- Oral disorders, such as dry mouth or thrush
- Cranial neuropathy

Another cause of burning mouth, is a contact sensitivity to common substances, such as sodium lauryl sulfate, a surfactant commonly used in household products, cinnamaldehyde, toothpastes, and other dental materials.

Treatment is directed towards eliminating the etiological factors. Many options are available, but different agents may be tried before finding one or a combination of drugs that reduce (or eliminate) mouth pain. A few examples include clonazepam, benzodiazepines, tricyclic antidepressants, alpha-lipoic acid, capsaicin, artificial saliva products, oral rinses or mouthwashes, and B vitamins.

In addition to medications, other measures, such as drinking more fluids, eliminating the use of cigarettes and spicy and hot foods, and the use of a different brand of toothpaste may help to improve glossodynia. Reducing excessive stress is also advised.

Answered by:
Dr. Ted Tewfik

Treating Pruritus Ani

5.

How can you best treat pruritus ani?

Question submitted by:
Dr. George Poland
Pierrefonds, Québec

A careful history and physical examination is the essential first step. There are many causes for pruritus ani including parasite infestation, psoriasis, atopic dermatitis, Crohn's disease, hemorrhoids, neurodermatitis, allergic contact dermatitis, and fecal incontinence. A clear diagnosis can lead to a treatable primary cause.

A common cause of anal itching is irritation from soiling and sometimes over zealous cleansing of the area. Restoration of good bowel routines with adequate fiber and oral fluid intake can reduce irritation from soiling, or exacerbation from hemorrhoidal itching. The use of mild nonfragrance cleansers and moisturizers, preferably with an ointment base, can be very soothing, especially after bowel movements.

Answered by:
Dr. Scott Murray

Impact and Treatment Options of Luteal Insufficiency on Fertility

6.

What are the impact and treatment options of luteal insufficiency (LI) on fertility?

Question submitted by:
Dr. Dominique Duchesne
Pierrefonds, Québec

Luteal insufficiency (LI) was thought to be a cause of infertility in some women. More recently, evidence suggests that this may not be the case, as fertile women have also been found to suffer from this condition. LI refers to an abnormal synchronization between the secretion of ovarian progesterone hormone during the second half of the menstrual cycle and endometrial lining maturation and thickness. It can be identified through endometrial biopsy during the latter half of the menstrual cycle in combination with a progesterone level measurement. Progesterone levels, however, can be quite sporadic, and thus, such testing is imperfect for correlation. In the past, women diagnosed with LI were treated with vaginal progesterone suppositories in the latter half of the cycle to help maintain the endometrium to support possible embryo implantation. This practice is still done during infertility treatments in women with ovulatory disorders treated with ovulation stimulating agents. LI can be seen in women with oligomenorrhea, cycles greater than 35 days. Oligomenorrhea is best treated with ovulation inducing agents to normalize the cycle length, and consequently, the downstream effects on the endometrium. Progesterone supplementation in this context is used as an adjunct to treat the endometrium and not as a treatment for LI. Given the emotion and effort associated with fertility treatments, the addition of progesterone after ovulation induction is a standard practice and it is difficult to differentiate what impact it has towards successful pregnancy from the impact of other components of ovulation induction and fertility management.

Answered by:
Dr. Cathy Popadiuk

Significance of Giant Platelets in an Asymptomatic Patient

7.

What is the significance of giant platelets in an asymptomatic individual's blood work?

Question submitted by:
Dr. Nafisa Aptekar
Brampton, Ontario

Similar to young red blood cells called reticulocytes, young platelets may be slightly larger in volume, and, rarely, a giant platelet may be noted. Also, platelet volumes can be variable due to production by the demarcation of membrane in megakaryocytes. In an asymptomatic patient with a normal platelet count, no further investigations are required.

If there is associated thrombocytopenia and a history of bleeding, a search for an underlying cause is warranted. With acquired causes, the most common cause of isolated thrombocytopenia and occasional giant platelets is immune thrombocytopenia (ITP) (previously called immune thrombocytopenia purpura). If there is a family history of thrombocytopenia and bleeding, then familial and congenital causes should be considered. These are extremely rare, and the most well known of these is the May-Hegglin anomaly. This is an autosomal dominant genetic disorder involving mutations in the MYH9 gene encoding for the nonmuscle myosin heavy chain IIA (NMMHC-IIA). Patients may also have leukocyte inclusions (Döhle-like bodies) and variable clinical features of sensorineural hearing loss, cataracts, and renal failure.

Answered by:
Dr. Cyrus Hsia and
Dr. Kang Howson-Jan

Herpes Zoster Vaccination after Having Been Recently Infected?

8.

I recently had a patient infected with herpes zoster. Is there any point in having this patient get the new vaccine to prevent another attack?

Question submitted by:
Dr. Steve Sullivan
Victoria, British Columbia

This is an important question, as anecdotally, it is the anxiety created by an episode of zoster that motivates a visit to the clinic to seek this relatively expensive vaccine. Although there are no studies to prove it, it is theoretically unlikely that the vaccine will have any significant efficacy in someone who has recently had zoster. The vaccine is, in fact, a high titre preparation of a live attenuated Varicella-zoster virus (VZV). It is presumed to function by boosting the pre-existing immunity of someone who is already harbouring the virus. It is unlikely that the attenuated vaccine strain will further boost immunity in someone who has recently experienced a reactivation with a wild-type virus. Therefore, I would suggest that vaccination is probably only beneficial when any clinical zoster (or chickenpox) has occurred some time ago. I would suggest a time lapse of at least five years.

Answered by:
Dr. Michael Libman

Syringing of Ear Cerumen in Children

9.

Are there age-based guidelines for syringing of ear cerumen in children? When should they be referred to an ENT specialist?

Question submitted by:
Dr. R Bhyat
Brampton, Ontario

It is possible to safely remove cerumen with ear syringing in children of any age, with the caveat that the technique used for children – especially young children – is not the same as for adults. As well, if there is any question of a perforation of the ear drum, the child should be referred to a otolaryngologist for assessment. When undertaking the removal of ear cerumen by syringing, the first step is to ensure that the child is appropriately restrained, ideally in the upright position and ideally by a parent or caregiver. The child should be appropriately draped with a towel to deal with any spillage. The choice of equipment is also crucial; a large metal ear syringe with a metal nozzle is spectacularly unsuited for syringing wax from a child's ear. My preferred instrument is a 10 mL syringe with the nozzle being either a plastic angiocath sleeve or (my preferred nozzle) the distal part of a "butterfly" style vacutainer needle with the needle and tip removed, leaving the soft plastic cannula with a Luer lock attachment that can be used to secure the cannula to the syringe. My choice of a 10 mL syringe is deliberate, as with larger syringes Poiseuille's law suggests that the delivery of water flow may be less than optimal. A supply of luke-warm water needs to be within ready access. The syringe is filled with the luke-warm water, and the plastic cannula is inserted into the ear canal with gentle, continuous pressure. It may be helpful to pull the helix of the ear slightly posteriorly while the water is being applied. A K-basin type container should be used to collect the drainage from the ear. Patience is important. It often requires three to six syringes full of water to clear the ear canal, but it would be rare for this technique not to succeed.

Answered by:
Dr. Michael Rieder

Treating Hyperhidrosis

10. Besides aluminium species and botox, is there a good treatment for hyperhidrosis?

Question submitted by:
Dr. K. Singh
Burlington, Ontario

These two options tend to be favoured, as they are generally effective and have low rates of side effects. Other topical options include boric acid, 2 to 5% tannic acid solutions, resorcinol, potassium permanganate, formaldehyde, glutaraldehyde, and methenamine. Contact sensitization tends to limit formaldehyde use. Topical use of anticholinergic drugs could theoretically be tried to avoid systemic side effects, but poor absorption leads to increasing concentrations in applications, which then leads to systemic absorption and systemic unwanted side effects.

Systemic anticholinergics, such as propantheline bromide, glycopyrrolate, oxybutynin, and benztropine are somewhat effective; however, they tend to be limited due to their side effects, such as blurred vision, dry mouth, and constipation. Iontophoresis is a physical method that consists of passing a direct current across the skin. This can be a particularly useful alternative to chemical or neurotoxin treatment of topical hyperhidrosis.

Answered by:
Dr. Scott Murray

Accuracy of the Research Done on Influenza Strains

11. How often are the researchers wrong about the strains of influenza for each upcoming flu season?

Question submitted by:
Dr. Pam McDermott
Huntsville, Ontario

It is not common that researchers are completely wrong about which strains to include in the annual influenza vaccine. However, it does happen every few years that one (or very rarely more than one) of the three vaccine strains is not an exact match to the related predominant circulating strain. This is because the predictions must be made many months ahead of time to allow manufacturers to gear up for production. These predictions are based on viruses that circulated during the previous year, and some information on activity in the southern hemisphere (for the upcoming northern hemisphere winter). Differences between strain variants in the vaccine and the actual circulating strain are typically very small but may be sufficient to significantly reduce the already imperfect vaccine efficacy for that strain. A difference in one strain does not affect the efficacy of the other two strains in the vaccine. Two-and-a-half years ago, of course, there was a complete mismatch, as a novel H1N1 strain emerged from Mexico in April 2009 that was highly divergent from the H1N1 strain in the vaccine. As we all know, this strain rapidly became dominant and required the emergency preparation of a new vaccine.

Answered by:
Dr. Michael Libman