MMR and Autism

Although I recognize that emotion frequently trumps evidence in changing opinion, knowledge of the best science occasionally comes in handy to dispel medical myths. Hylid and colleagues (Ann Intern Med 2019; 170 (8): 513-520) offer the third, and largest, study conducted since Andrew Wakefield’s “measles vaccine causes autism” hoax.

The Danish patient registry allows for tracking of all people who remain in the country. These investigators enrolled all children (n= 657,461) at one year of age born between the years 1999 and 2010 to Danish-born mothers. The children receive the usual childhood vaccinations including MMR at 15 months and again at 4 or 12 years of age. Over the course of this study 6,517 children were given a diagnosis of autism. During the follow-up of these kids from ages 7 to 14 years, there was no difference in the incidence of autism between vaccinated and unvaccinated children. Similarly there was no increase in the likelihood of autism in children with a sibling with autism or in children with risk factors for developing autism.
Beware Analgesics!

**Amitriptyline:** In a small, but well-designed randomized controlled trial, 146 participants with chronic lower back pain, amitriptyline (25 mg/day) was compared with benztropine (1mg/day) a mouth-drying placebo. Amitriptyline offered no improvement in pain, disability or work outcomes at six months compared with the benztropine placebo. (Urquhart et al JAMA Intern Med. 2018; 178 (11) 1474-1481) Older, larger studies have shown lack of efficacy of amitriptyline in larger doses in chronic back pain.

**Tramadol:** Think twice about using tramadol. It is often considered safer than other opioids, but tramadol has the same warnings about misuse, abuse and dependence as other opioids. In addition, it is associated with other risks including serotonin syndrome, seizures and hyponatremia. Tramadol isn't more effective than NSAIDs for soft tissue injuries or back pain. If you do prescribe tramadol, also consider prescribing naloxone, particularly in patients taking benzodiazepines.

**Ibuprofen vs Morphine for Post-op Pain in Kids:** Poonai et al. (CMAJ. 2017; 189(40): E1252-E1258) conducted a randomized superiority trial comparing oral morphine (0.5mg/kg) with ibuprofen (10mg/kg) in children 5 to 17 years of age who had undergone outpatient orthopedic surgery (most commonly hardware removal, open reduction and internal fixation of the fracture or arthroscopy). The primary outcome was pain, according to the Faces Pain Scale.

The researchers analyzed data for 77 participants in each of the morphine and ibuprofen groups. Both interventions decreased pain scores with no difference in efficacy. The median difference in pain score before and after the first dose of medication was 1 for both morphine and ibuprofen (p = 0.2). For doses 2 to 8, the median differences in pain score before and after the dose were not significantly different between groups. Significantly more participants taking morphine reported adverse effects (45/65 [69%] v. 26/67 [39%]), most commonly drowsiness (31/65 [48%] v. 15/67 [22%]) in the morphine and ibuprofen groups, respectively.

**Magic Mouthwash**

A recent Prescriber’s Letter listed 11 different recipes for assistance in relieving oral pain or in healing ulcers... Duke Magic Mouthwash, Koolstat, Miles Solution, Mary’s mouthwash and Pink Lady.

First off, there’s no significant evidence that any magic mouthwash recipe is better than homemade salt and bicarbonate of soda. Further, there are no data to suggest that adding other ingredients such as steroids, antibiotics or nystatin improves pain relief or infection prevention. Kroger, CVS and Walmart pharmacies are selling the BLM mouthwash compounding kit (Benadryl, Lidocaine, Maalox with simethicone) for $50-$55. The kit makes 8 oz.

The Prescribers Letter suggests a simple formula and my daughter-in-law geriatrician concurs:

<table>
<thead>
<tr>
<th>Viscous lidocaine</th>
<th>Diphenhydramine</th>
<th>Mix 1:1:1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mylanta</td>
<td></td>
</tr>
</tbody>
</table>

Dispense 240cc

Sig:
Swish for 1 to 2 minutes to ensure appropriate coating of the mouth.
Avoid eating/drinking for 30 minutes after use.
Dose every 4 to 6 hours.

My pharmacist friend indicates he will compound it for $22 cash money.

You may access previous issues at [https://www.rmhp.org/i-am-a-provider/provider-resources/publications-for-providers](https://www.rmhp.org/i-am-a-provider/provider-resources/publications-for-providers).

**DISCLAIMER:** The information and statements contained in “The Prudent Prescriber” constitute the opinions of its author, unless otherwise noted. Nothing contained in “The Prudent Prescriber” is intended to demonstrate, indicate or suggest that any person or company is incompetent or unfit. Likewise, nothing contained in “The Prudent Prescriber” is intended to damage the business, business relationships, business dealings or reputation of any person or company.