

Cherry Bombs: Disasters in Cherry Picking

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Hypokalemic Periodic Paralysis

What is it?

- Periodic muscle weakness due to autosomal dominant genetic defects in muscle ion channels (Ca^{2+} or Na^+)
- Variants: (1) hypokalemic, (2) hyperkalemic, (3) hyperthyroidism and (4) Anderson-Tawil syndrome (classic triad of hypokalemic PP + ventricular arrhythmias + face/hand dysmorphisms)

What is the clinical presentation?

- Attacks start in late childhood/teens
- Triggers: post-exercise (not during), carbohydrate rich meals, stress, steroids, salbutamol, cold, infection or alcohol
- Clinical exam
 - Painless muscle weakness (mild to complete flaccid paralysis)
 - Lower > upper, proximal > distal, decreased/absent DTRs
 - Bulbar muscles mildly/rarely affected
 - Sensation and autonomic function normal

How is this managed?

- Potassium replacement
 - Oral (preferred in peds)
 - 1-2 mEq/kg/dose (max 20 mEq)
 - Check K q2h after (or q4h after extended release)
 - Tip: for kids, if can't swallow pills, mix K-elixir in ½ cup cold water/juice or can dissolve K-Dur in ½ cup cold water
 - IV (can't tolerate PO, arrhythmias or severe paralysis)
 - 0.5-1 mEq/kg/dose (max 40 mEq) run at ≤ 0.5 mEq/kg/h (up to 10-20 mEq/h)
 - Check K 1h after infusion done
 - **Warning:** 25% developed potassium drop after K replacement started
 - **Warning:** Watch for rebound hyperkalemia during replacement
 - Full neurologic recover within min to hours
 - **Tip:** Always check and replace low Mg before replacing K (low Mg promotes K excretion +/- prevents K reabsorption in kidneys)
- Other strategies
 - **Tip:** Check TSH (+/- T3, T4) for hyperthyroidism
 - Propranolol may shift K out of cells
 - Acetazolamide and spironolactone can prevent attacks
 - Avoid triggers and use K supplement if symptoms develop (but K supplement does not prevent attacks)

Pinworms (aka Threadworms)

What is it?

- Enterobius vermicularis
- Humans are only known host
- Most affects 5-10yo, household contacts, institutionalized patients

How is it spread?

- Fecal oral ingestion of eggs
- Female worm matures in colon and lay eggs at anus at nighttime
- Scratching anus spreads eggs from hands (also via clothes, linens, co-bathing etc)

What are the symptoms?

- Anal pruritus at night
- Can also see abdm pain, weight loss, UTIs, gyne symptoms, bowel perforation, appendicitis? or respiratory symptoms (nose to lungs)

How is it diagnosed?

- Direct visualization is diagnostic
- If high suspicion but no worms, do paddle test for eggs. Collect samples in morning before bathing or defecation and send to BC CDC (<http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Forms/Labs/ParaReq.pdf>)

How is this treated?

- **Tip: Must treat all household members**
- Both meds can be chewed or swallowed
- Mebendazole (Vermox): Prescription. 100 mg PO once, **repeat in 2 weeks** (\$8/tab). Same dose kids > 2 yo and adults. Not for pregnancy.
- Pyrantel pamoate (Combantrin). Over the counter. 11 mg/kg (max 1g) PO once, **repeat in 2 weeks** (\$23 for 12 x 125 mg tabs). Indicated for pregnancy if symptomatic.

Combantrin dosing guide

WEIGHT (KG)	DOSE (MG)	TABS
11-16	125	1
17-28	250	2
29-39	375	3
40-50	500	4
51-62	625	5
63-73	750	6
74-84	875	7
> 84	1000	8

How can transmission be prevented?

- Must wash hands with **soap & water**, clip nails, shower and change underwear every morning x 3d, no co-bathing, avoid scratching anus, biting nails, thumb sucking etc.
- Wash linen/clothes hot water & hot dryer, disinfect bathroom/surfaces, vacuum carpets, inform contacts
- Bathe pets but don't need to treat them

Subconjunctival Hemorrhages

- Red flags
 - Any vision loss or pain
 - Children (esp 1-12 mo old) for non accidental trauma/asphyxiation - neonates < 1 month can be normal from uterine contractions during vaginal delivery
 - Trauma or asphyxiation
 - Recent ocular surgery or injections
 - Contact lens use
 - Coagulopathy, anticoagulants or antiplatelets
 - Recurrent episodes
- Resolves in 2-3 weeks
- Cold compresses and artificial tears PRN (don't really do anything)
- Check BP with GP (association with chronic HTN)