

Project: Ghana Emergency Medicine Collaborative

Document Title: Ghana Grab Bag Pediatric Quiz

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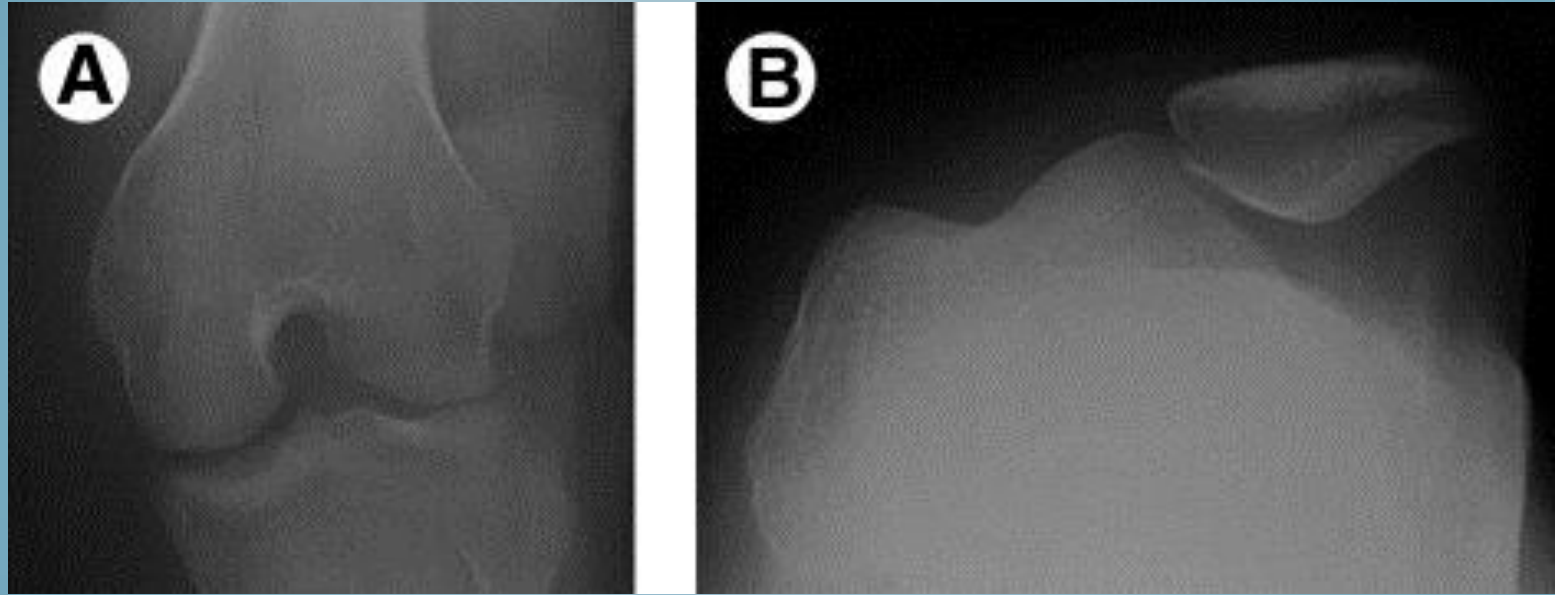
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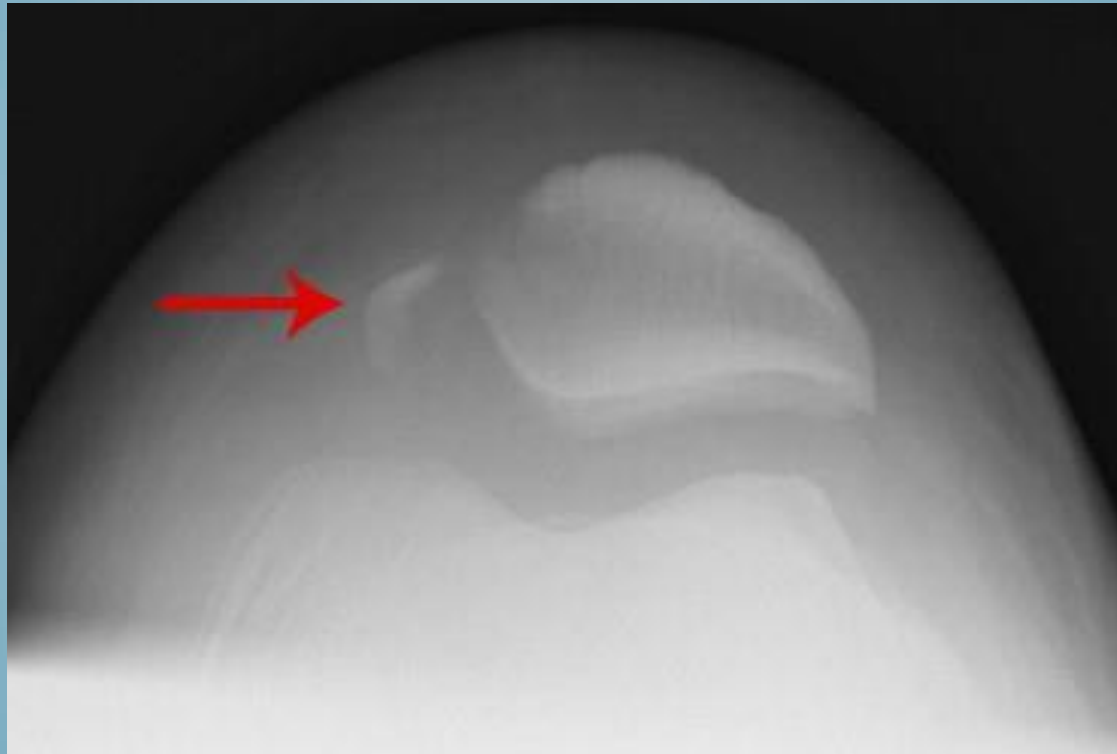
**GHANA
GRAB
BAG
PEDIATRIC
QUIZ**



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Eval and Imaging of Patellofemoral Sports Disorders. Oper Tech Sports Med 18:68-78.

1. *What do you see?*



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2. How does this change your management?

3. *What is wrong with this patient?*

3 year old female with red eyes, vomiting, and sweating. She is awake, but crying and restless. She lives outside of Kumasi and other children and adults in her village have had similar symptoms. Some people improved when the herbalist gave them leaves from this plant to chew on .



4. SODIUM CONTENT OF THE FLUIDS

- *List them*

- *Normal Saline*

- *½ Normal Saline*

- *¼ Normal Saline*

- *Lactated Ringers*

- *3% Normal Saline*



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5. *What type of fracture is this?*

6. WHAT IS THE DIAGNOSIS?



 PD-SELF Com4 (Wikimedia Commons)

- HPI

7.

- 11 year old male with two weeks of intermittent tactile fever, night sweats and a back lesion which was discovered three days after fever began

- Lesion was not tender or pruritic and was described as “red with a black/brown center approximately 1 inch in diameter.”

- Ten days prior he was prescribed TMP/SMX. His fevers continued and the wound ulcerated and surrounded by small pustules. On the morning of presentation the patient noticed a new red rash over his legs was not itchy or painful.

- SOCIAL HISTORY

- The patient lives in rural Missouri on a farm with horses, cats, dogs, chickens and rabbits. There have been no known bug, spider or tick bites, though ticks were removed from clothing recently after being outdoors at home.

- PMHx

- The patient has no significant past medical history

- ALLERGIES

- None

- IMMUNIZATIONS

- UTD

7.

- ROS

- Negative for joint pain, positive for weight loss of 8lbs.The patient has had a normal activity level.

- PHYSICAL EXAM

- Flushed, fatigued the otherwise well-appearing , interactive boy with normal vital signs and an ulcerated lesion about 8mm in diameter over his lower thoracic spine
 - The lesion is erythematous and indurated with satellite pustules, and his legs have an erythematous diffuse papular rash with blanching over bilateral thighs. There is a tender, firm 1 x 0.5 cm lymph node in his right axilla.

7. WHAT IS THE DIAGNOSIS?

- A Cutaneous anthrax
- B Ulceroglandular tularemia
- C Brown recluse spider bite
- D Ehrlichiosis
- E MRSA infection



8.


7 year old male presents to ED after awakening this morning with difficulty moving neck. Neck is stiff, head is tilted to the right. There is restriction of head movement. Left sternocleidomastoid (SCM) muscle is mildly tender to palpation. No masses are palpated. Patient otherwise has no complaints and is afebrile. C-spine imaging is normal.

PMHx: viral URI last week, now resolved

What is the diagnosis and appropriate management of this patient? If it does not improve, what would you want to rule out?

9. WHAT NEEDS TO BE DONE?



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A three month old previously healthy former full term infant is brought into RED actively having a generalized tonic clonic seizure. The baby lives in Kumasi with her aunt as her mother died during childbirth. The aunt is a business woman, but has had difficulty working while taking care of the baby.

The baby has not had a fever or any ill symptoms. She takes bottles made from store bought formula. She eats approximately 6oz every 3 hours. The baby last ate 30 minutes prior to this seizure episode. FBS is 6.

10. What question should you ask the aunt to make the diagnosis?

1. Lateral patellar dislocation

- What to do?
 - Relocate
 - *You may relocate prior to radiographs*
 - Assess perfusion
 - *Disruption of popliteal artery may occur with dislocation and can have resultant limb hypoperfusion*
 - *Posterior tibial and dorsalis pedis pulses*
 - Ensure peroneal nerve function
 - *Sensation between the great and second toe and ankle dorsiflexion should be documented*

2. AVULSION FRACTURE – MAY NEED OPERATIVE MANAGEMENT

- *Medial avulsion fracture suggests that mechanism was a patellar dislocation that spontaneously reduced*
- *Patients knee likely swollen and tender, resist full extension*
- *For non-operative management*
 - *Extensor mechanism must be maintained*
 - *Minimal displacement of fragments (2-3mm)*
 - *Minimal dislocation of articular surface (2-3mm)*

3. Organophosphate poisoning

Signs and symptoms of organophosphate poisoning can be divided into 3 broad categories, including (1) muscarinic effects, (2) nicotinic effects, and (3) CNS effects.

Mnemonic devices used to remember the muscarinic effects of organophosphates are SLUDGE (salivation, lacrimation, urination, diarrhea, GI upset, emesis) and DUMBELS (diaphoresis and diarrhea; urination; miosis; bradycardia, bronchospasm, bronchorrhea; emesis; excess lacrimation; and salivation).

Muscarinic effects by organ systems include the following:

Cardiovascular - Bradycardia, hypotension

Respiratory - Rhinorrhea, bronchorrhea, bronchospasm, cough, severe respiratory distress

Gastrointestinal - Hypersalivation, nausea and vomiting, abdominal pain, diarrhea, fecal incontinence

Genitourinary - Incontinence

Ocular - Blurred vision, miosis

Glands - Increased lacrimation, diaphoresis

Nicotinic signs and symptoms include muscle fasciculations, cramping, weakness, and diaphragmatic failure. Autonomic nicotinic effects include hypertension, tachycardia, mydriasis, and pallor.

CNS effects include anxiety, emotional lability, restlessness, confusion, ataxia, tremors, seizures, and coma.

KMA:

Life threatening stench engulfs parts of Kumasi, stalls activities

Residents in some parts of Kumasi are complaining of a pungent smell which is making life in the suburbs unbearable.

The stench has engulfed several areas including Santasi, Brofoyedru, and Kwadaso, for the past five days and is currently making life unbearable for residents who have complained of vomiting, coughs and sleepless nights.

Luv FM's Erastus Asare Donkor, reported that the pungent smell is emanating from a weedicide storage facility at a chemical farm in Atwima-Boko owned by one Osei Gyasi.

Erastus Asare Donkor, who was at the scene, said "there is a thick cloud of chemical smoke billowing from the farm."

A resident recounted that, "from last week it started. The way the thing is affecting us, it is very serious ... you can't even breathe, we've been covering our mouths [and noses] with handkerchiefs."

Police personnel were seen at the scene and it is unclear, exactly what they were there do. The Mayor of Kumasi, Mr. Samuel Sarpong, is also expected visit the area to assess the situation.

3.

Angelina Mensah, Deputy Director of Public Relations at the Environmental Protection Agency (EPA), told the Super Morning Show on Joy FM Thursday that officers from her outfit had been to the site.

Their investigations, she said, show there was a spillage – of Organophosphate - from Kumark Company and "EPA Kumasi has involved NADMO, Ministry of Food and Agriculture and other security agencies to try to contain the situation."

She advised that because the chemical was not visible, it was safe for residents to stay far away from the site while the EPA tried to get them protective gears.

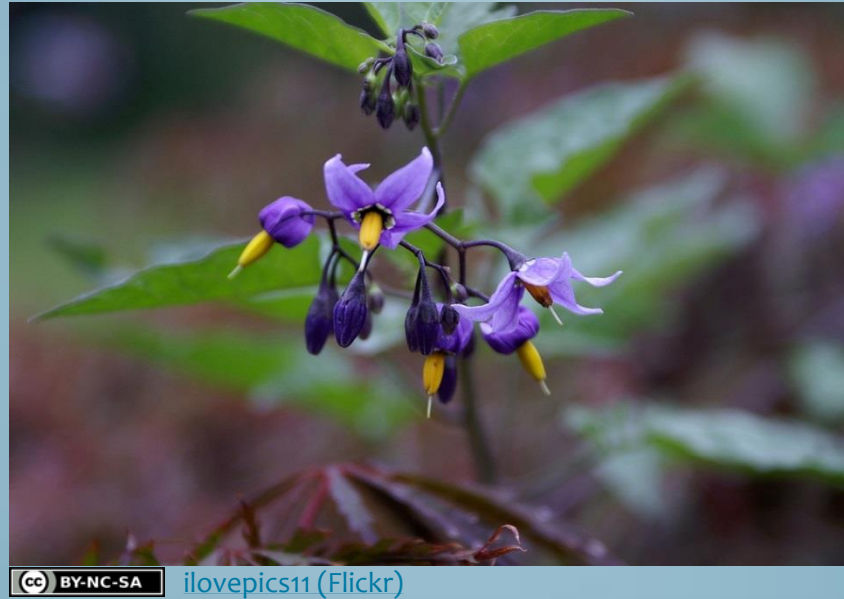
Any resident with symptoms of Organophosphate poisoning (eye irritation, vomiting, dizziness headaches), they should seek medical care immediately, she added.

She said affected persons could also call the Poison Centre on 030238626 or 0302243552.

The Deputy PRO of the EPA was hopeful that a greater part of the spillage will be contained by close of Thursday.

Myjoyonline.com
[2012-12-06 14:07:04]

3.



Atropa belladonna or “deadly nightshade” herbaceous plant found in Europe, northern Africa and western Asia. The active agents in belladonna: atropine, hyoscine (scopolamine), and hyoscyamine have anticholinergic properties. Belladonna acts as an antimuscarinic agent, blocking acetylcholine receptors.

4. SODIUM CONTENT OF THE FLUIDS

- *List them*
 - **Normal Saline**
 - 154meq/L sodium
 - **½ Normal Saline**
 - 77meq/L sodium
 - **¼ Normal Saline**
 - 39meq/L sodium
 - **Lactated Ringers**
 - 130meq/L sodium (*also 109meq/L chloride, 28meq/L lactate, 3meq/L potassium, 4meq/L calcium*)
 - **3% Normal Saline**
 - 513meq/L sodium

5. MONTEGGIA FRACTURE

Fracture of proximal third of the ulna with dislocation of the radial head



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Source Undetermined

5. SALTER HARRIS CLASSIFICATION

- * **S**-fracture involves a Slip or Separation of the growth plate (Type I)
- * **A**-fracture is Above the growth plate (Type II)
- * **L**-fracture is Lower than the growth plate (Type III)
- * **T**-fracture is Through the growth plate (Type IV)
- * **R**-fracture involves a cRush of the growth plate (Type V)

6. Lingua villosa nigra “Black hairy tongue”

- Can be caused by bacterial or fungal overgrowth
- May send tongue culture
- Our patient treated with 7d PO fluconazole
- Refer to dermatology if no improvement

7. ULCEROGLANDULAR TULAREMIA

- Ulceroglandular tularemia is one of the six major clinical forms of disease caused by the bacterium *Francisellatularensis*
- Most common type overall, the second most common in children
- Associated secondary rashes which may be confused with drug reactions including maculopapular, erythema multiforme, erythema nodosum or urticarial
- Systemic symptoms such as fevers, headaches, malaise, myalgias, abdominal pain emesis or diarrhea may be associated with ulceroglandular tularemia
- Average incubation time is 3-5 days
- Diagnosis of tularemia is made by antibody titer and the most common treatment is with aminoglycosides for 7-10 days
- Exposures can be from animals or ticks.
- Tick exposures are more commonly on head, neck, trunk, buttocks and lower extremities
- Lesions occurring on hands and arms occur after animal exposures

8. Muscular torticollis (inflammatory and congenital): spastic, tender SCM muscle is opposite to the direction of head rotation

D/C home with NSAIDS, cold compresses, rest. If no improvement over 1-2 weeks, rule out posterior fossa tumor

9.



 [drewleavy \(Flickr\)](#)

The tongue has a great blood supply and is one of the fastest healing parts of the body. The risk of infection is also incredibly low. Repair those that cause problems with breathing, speech, and/or swallowing.

RECOMMEND: Soft diet without small pieces/parts (ie. no nuts, popcorn, etc),
rinse mouth after eating

10. What question should you ask the aunt to make the diagnosis?

Ask the aunt how she prepares the formula.

Typical formulas are 2 ounces (60 milliliters) of water to 1 scoop of formula.

Small babies can become hyponatremic due to water intoxication when caregivers dilute formula to make it last longer (and save money).