Division Updates:

EPIC:

- Non-Invasive pressure support order set finalized and available

Consults:

- **Dermatology:**
  - Tele-dermatology Consultations are **NOT NEEDED to expedite visits** to Dermatology.
  - An **URGENT VISIT PATHWAY** has been established to allow the ER to notify dermatology of the need for urgent appointments using the Epic message system (see below)
- **Anesthesiology**
  - Anesthesiology would like to be notified for any patients coming to ED within 72 hours of PACU/surgical procedure with anesthesia

GI Cocktail

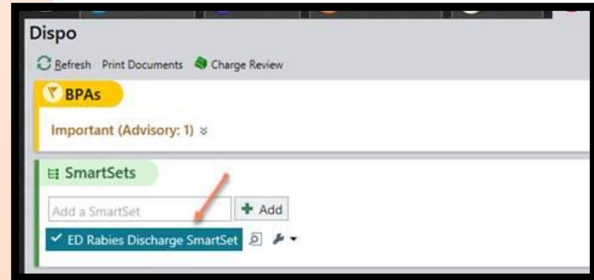
The GI cocktail order has been updated in Epic with doses based on age and weight range. Orders for GI cocktail will use a nested panel with restrictors based on actual weight and age ≥3 years:

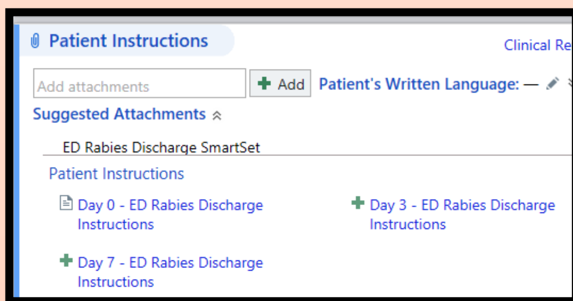
- 20 kg to less than 30 kg: 20 mL Maalox + 4 mL Viscous Lidocaine 2%
- 30 kg to less than 40 kg: 30 mL Maalox + 6 mL Viscous Lidocaine 2%
- 40 kg to less than 50 kg: 30 mL Maalox + 8 mL Viscous Lidocaine 2%
- 50 kg and up: 30 mL Maalox + 10 mL Viscous Lidocaine 2%

** Previously, typing "GI cocktail" would also bring up an erroneous suggestion for "Magic mouthwash without lidocaine," which has been corrected.

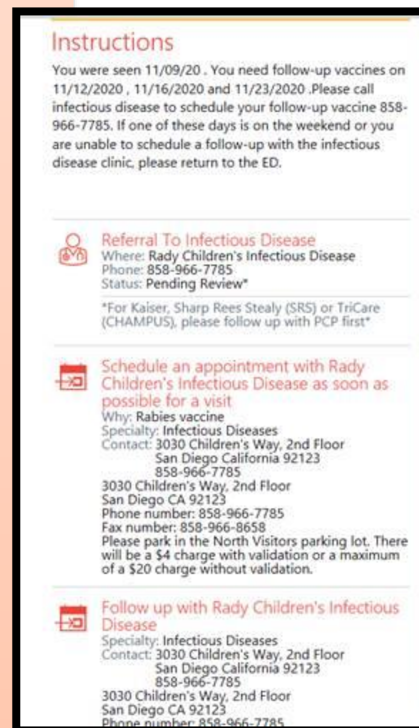
Rabies Request for Smart Form / Discharge Order:

1. If a patient has a chief complaint of animal bite or the rabies vaccine is ordered – the Rabies Discharge SmartSet will display:
2. If you select the discharge SmartSet, the following will happen automatically:
    - A follow-up to Infectious Disease in selected
    - A referral to Infectious Disease is ordered
    - Disposition is set to 'discharged'
3. You will need to choose the appropriate followup instructions
    - Select Day 0, Day 3, or Day 7 discharge instructions



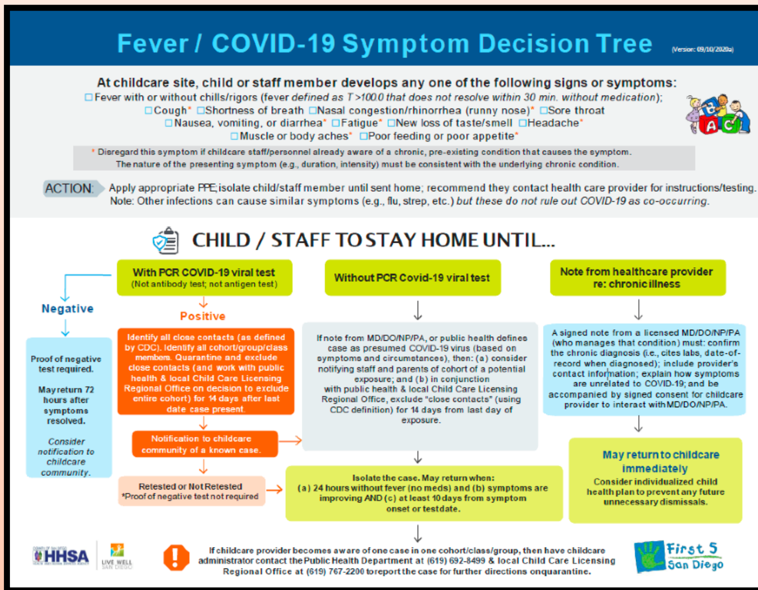


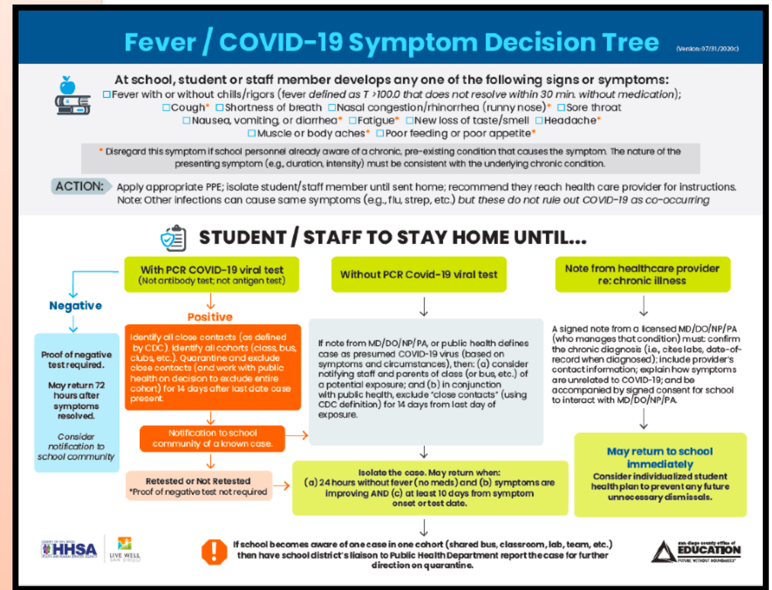
4. Select Clinical impression
    - Dog bite, Dog bite ato face and Exposure to bat without known bite will be suggested but you are not limited to these
5. Sign the referral order
6. This is a screenshot of what it will look like when complete



COVID:

- If anyone is sick or showing signs of sickness, then please have them stop doing their work, inform the MOOD so that they can go home and rest. They will also need to check in with Occupational Health as well
- Awaiting recommendations on best way to minimize exposure in close quarters such as the shared workspaces.
- It is not feasible to police people drinking or eating in the non-patient areas. If an individual is not wearing their mask for a prolonged period of time, then please remind them that it is the safest way to minimize potential exposure.
- For caregivers and patients that wear inappropriate masks (i.e., mask with vent), Tim Rawls is working on improved signage and will follow up with the Charge/Flow Nurses. The best way to frame this is that it is for everyone's benefit to wear a mask.
- COVID testing: for patients undergoing a work-up with the possibility of admission or OR (i.e. suspected appendicitis patients), remember to order the wet COVID swab as soon as possible to reduce potential delays





- How do you contact Anesthesia?
  - During a regular workday, the Anesthesiologist-in-Charge carries a portable phone (225569). That should be answered between 7:30 and about 5 pm. After hours, the anesthesiologist on call should be paged. That person can then reach out to the anesthesiologist who cared for the patient.
  - If at any time, those mechanisms are unsuccessful, the OR desk (225856) can assist in contacting the appropriate anesthesiologist.

Clinical Director Update

Fareed Saleh, MD, MHA

- *APPs:*

- Majority of November RS shifts covered (24 of 30)
- Actively recruiting for one additional APP with goal of 3 total (all RS)

- *Behavioral Health*

- All BH should have COVID swabs done
- Make sure to update/refresh notes when 'medical clearance' is done
- After group discussion at the PEM Division meeting the MOOD or any PEM physician will not be responsible to sign transport documentations for patients in the Psych ED

PEM Procedures Workshop:

Thank you to all the physicians who were able to attend Staff SIM, this year! We hope you had a great time!

Burnout getting you down?

Scan below for one tactic that may help!

Despite these trying times – wonderful people are working hard & doing their best to be great care providers & co-workers every day!

Showing gratitude has been shown to increase personal & professional well-being. Take a minute to offer some kudos & praise for a job well done – it may help you feel better too! ☺

Improvement Updates

Seema Shah, MD and Amy Bryl, MD

New Med Rec Banner:

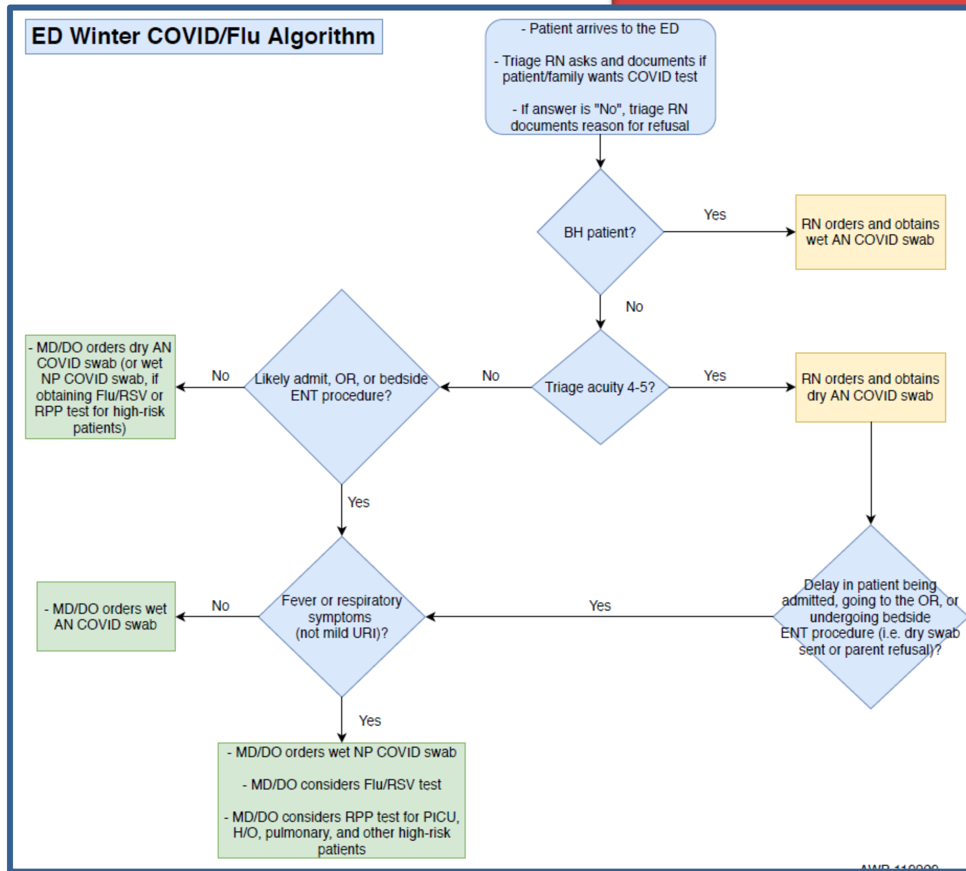
Test, Expect
Female
5 y.o., 8/10/2015
MRN: H3012040
Family Language: None
Total Time: 190:51
Code: Not on file (no ACP docs)
Ins: Uninsured
Search
Susan E Duthie, MD
Attending
Isolation: None
Incomplete Med Rec
ALLERGIES
Not on File

- **Don't forget to do your medication reconciliation!** We are currently at an average of 24% compliance! **Plenty of room for improvement*

Dispo
Refresh Print Documents Charge Review
BPAs
Important (Advisory: 1)
Complete med rec for this patient

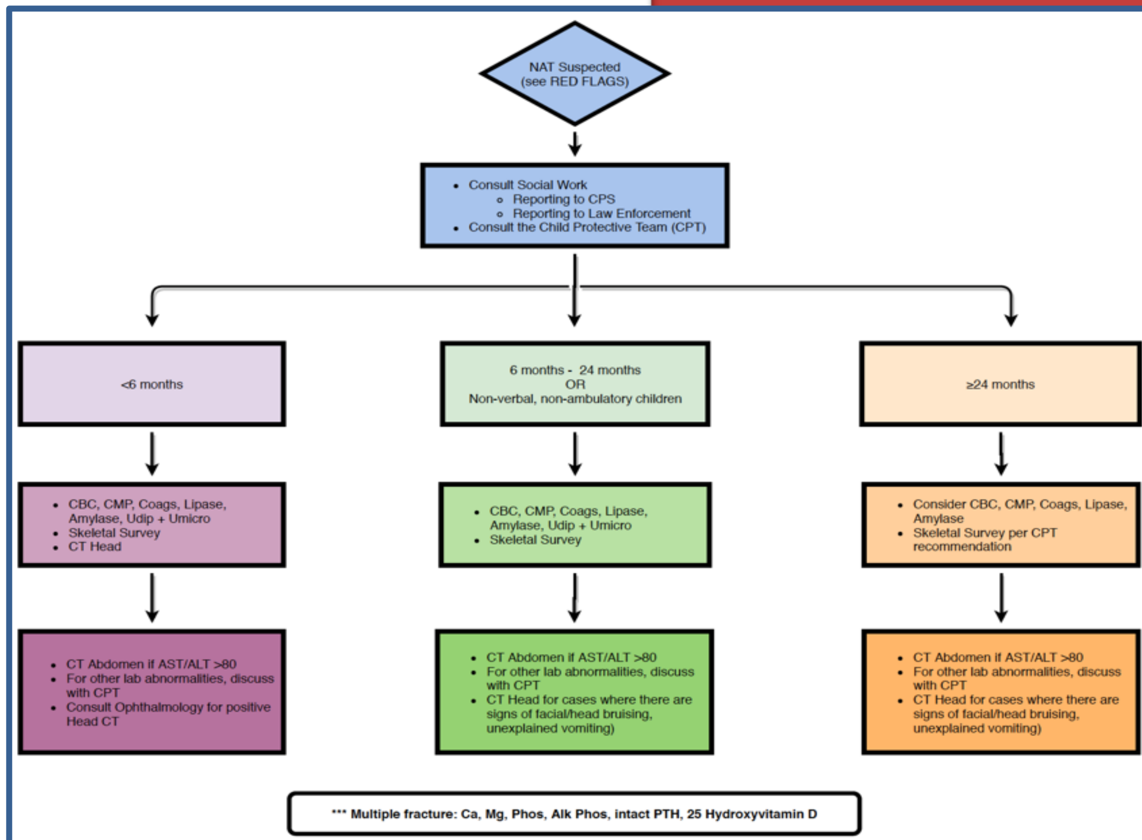
Amy Bryl, MD

ED Winter COVID/Flu Algorithm:



NAT Pathway

Karen Yaphockun, DO

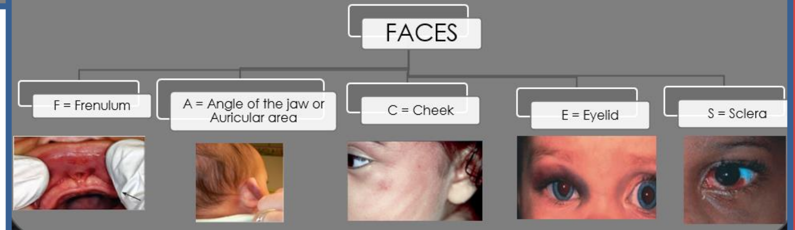


TEN-4 decision rule

1. ANY bruise in a child < 4 months of age OR 2. Bruising present in TEN region (torso, ears, neck) in children <4 years of age • Torso includes: chest, abdomen, ***back, buttocks, GU & hip	AND	NO confirmed accident in a public setting that accounts for bruising

PIERCE MC, KACZOR K, ET. AL. BRUISING CHARACTERISTICS DISCRIMINATING PHYSICAL CHILD ABUSE FROM ACCIDENTAL TRAUMA. *PEDIATRICS 2010:125(67)*
Sensitivity of 97% and specificity of 84% for predicting abuse
**** In many cases bruising over the spine is ok – "The Spine is Fine"*

TEN-4 **FACES** (additional areas to pay special attention to)



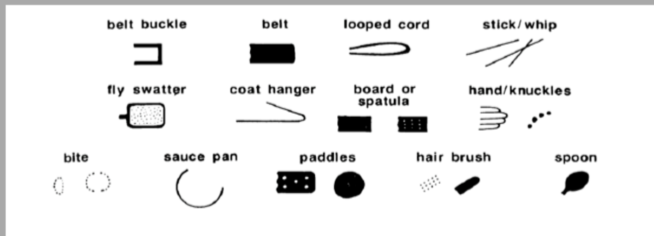
* HISTORY red flags

- Confessed abuse or injury that was un-witnessed
- Trauma history is absent, vague, or changing
- History is not consistent with injury or developmental stage of patient
- Delay in seeking care
- Prior ED visit for injuries
- Injury occurred during domestic violence

* FRACTURE red flags

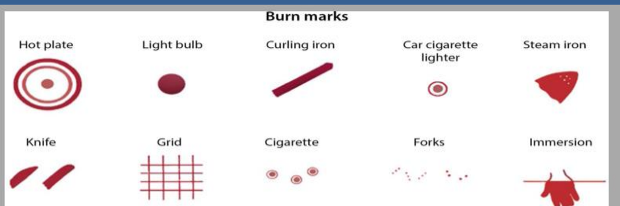
- Any fracture in a non-mobile child
- Multiple fractures, especially bilateral
- Complex skull fracture (branching, diastatic, multiple)
- Fractures of different ages/stages of healing
- Fractures associated with high suspicion for abuse: CML, posterior rib fractures, vertebral, sternal, scapular
- Epiphyseal separations

PATTERNED BRUISES



Pediatric Dermatology
Volume 23, Issue 4, pages 311-320, 8 AUG 2006 DOI: 10.1111/j.1525-1470.2006.00266.x
http://onlinelibrary.wiley.com/doi/10.1111/j.1525-1470.2006.00266.x/full#f2

BURNS



Marks from heated objects cause burns in a pattern that duplicates that of the object. Familiarity with the common heated objects that are used to traumatise children facilitates recognition of possible intentional injuries. The location of the burn is important in determining its cause. Children tend to explore surfaces with the palmar surface of the and rarely touch a heated object repeatedly or for a long time.

Reproduced from: Dubowitz H, Lane WG. Abused and neglected children. In: Nelson's Textbook of Pediatrics. Kliegman RM, Stanton BF, St Geme JW, Schor NF (Eds), 20th ed, Elsevier: Philapdelphia, 2015. Illustration used with *permission of Elsevier Inc. All rights reserved.*

Ultrasound Spotlight

Kathryn Pade, MD

Quick Reminder: **The Ultrasound Cup has started! GET YOUR SCANS IN!!**

Ultrasound in the Diagnosis of a Pediatric Hip Effusion

Case: A 6-year-old male presents with limping on the left leg. He has had no fevers and no history of trauma. He has no tenderness of the entire leg and full ROM of the left lower extremity. Point-of-care ultrasound of the left hip was performed.

Technique:

1. **Patient Position**: Supine.
    a. Tip: Expose the hip with drapes for patient comfort.
    b. Tip: If the patient will tolerate it, position the leg in slight abduction and external rotation.

2. **Probe**: High frequency linear probe (or the curvilinear probe if increased depth is required)
    a. Tip: For larger or older patients, use the linear probe with the larger/wider footprint to allow better visualization of anatomy.

3. **Technique:** With the patient lying supine, identify the greater trochanter on the symptomatic hip of the patient. Place the linear probe in the sagittal oblique plane parallel to the long axis of the femoral neck (with the indicator toward the patient's head). The femoral neck is a hyperechoic line lateral to the femoral head slanting downward. Move the probe superior until you identify the femoral head, which can be seen as a curved hyperechoic line. In the normal hip, the joint capsule appears as a hyperechoic band above the femoral head and proximal femoral neck.
    a. Tip: In pediatric patients with open growth plates, identification of the capital femoral epiphysis will help confirm you are in the correct location.

(Figure 1 and 2)

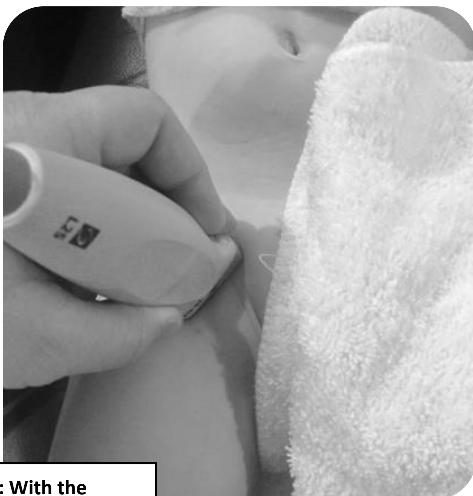


Figure 1: With the patient lying supine, place the linear probe over the long axis of the femoral neck.

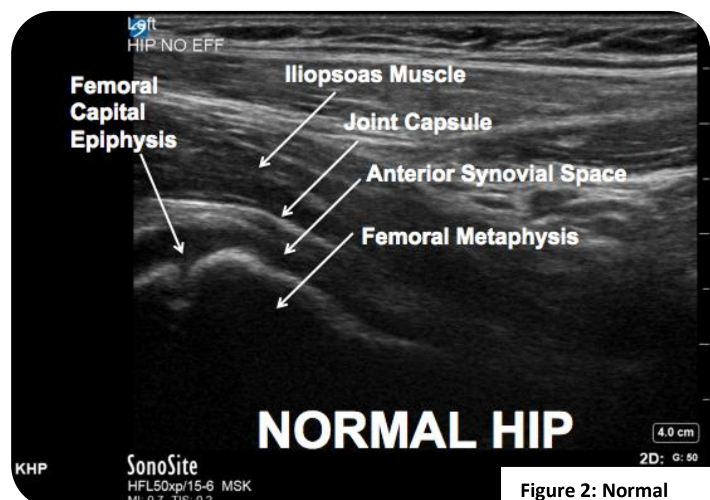


Figure 2: Normal Sonographic Anatomy of the Pediatric Hip

4. **Hip Anatomy:** The hip joint is formed by the articulation of the femoral head and acetabulum of the pelvis. The joint is enclosed by a fibrous capsule and surrounded by extracapsular ligaments. Normally, a small amount of physiologic fluid is present within the joint space (<5mm).

(Figure 3)

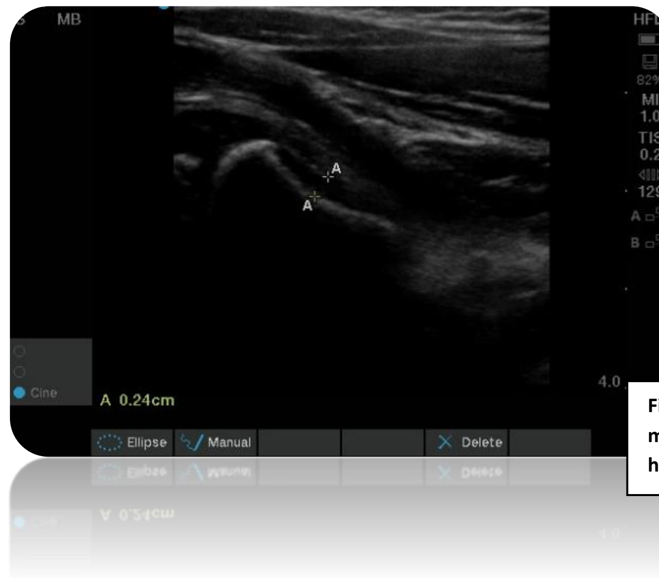


Figure 3: Normal sonographic measurement of the pediatric hip joint space

5. **Hip Effusion:** Measure the maximal distance between the anterior surface of the femoral neck and the posterior surface of the iliopsoas muscle. Sonographic criteria for a pediatric hip effusion is:
   - i. Anterior Synovial Fluid collection greater than 5mm OR
   - ii. >2mm difference when compared to the asymptomatic contralateral hip

   a. Tip: Compare the asymptomatic hip for anatomy and joint space measurement.

(Figure 4)

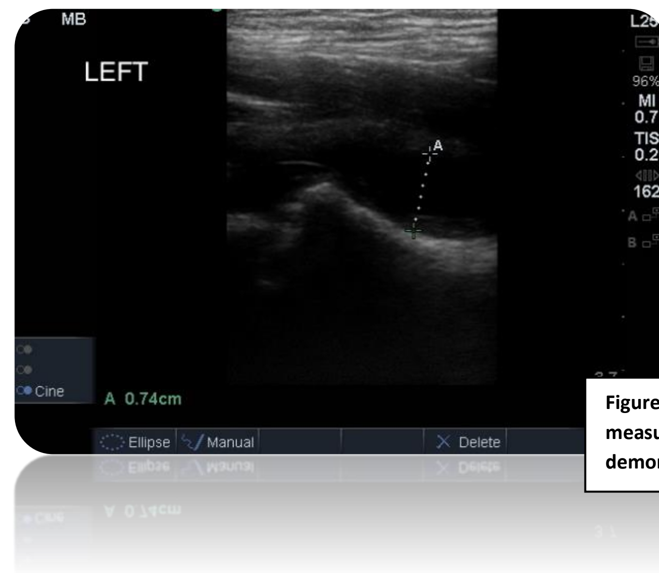


Figure 4: Sonographic measurement of a pediatric hip demonstrating a joint effusion.

ResearchUpdate

Kathy Hollenbach PhD, John Kanegaye MD, Michael Gardiner MD, & Margaret Nguyen MD

Just a Reminder:

- **Upcoming Topics for 3F Research Meeting** (Faculty and Fellows!)

AY 20-21	Topic
12/18/20	Common biostats questions on the boards
2/19/21	Presenting at meetings (writing abstracts)
4/16/20	Qualitative research basics
6/18/21	Survey research

Kawasaki Disease

- **Kawasaki disease (KD) service interested in suspected Multisystem Inflammatory Syndrome in Childhood (MIS-C)**

In addition to clear-cut KD, the KD service is interested in febrile controls with only 1 of KD criteria as well as patients with suspected MIS-C.

In addition to the familiar blood, urine, and oral swabs, there are new items:

- If family agrees, there are rectal swabs to break into Eppendorf tubes.
- If one of the POCUS-fellowship-trained attendings or myself are free/available, we're looking at RUQ for occult hydrops

If families want to opt out of components but consent to blood, they are still valuable subjects!
Enrollments of KD, controls, and MIS-C all count toward eligibility in the group authorship in the KD study.
Anyone interested in being oriented to enrollment should contact John Kanegaye.

Abbreviated entry criteria:

- < 18 years of age
- Fever (Tm ≥ 38.0° C)
- One of the following
  - ≥3-day fever AND 1 or more KD clinical criteria:
    - Rash
    - Red eyes
    - Red lips or mouth
    - Red hands or feet
    - Cervical adenopathy
  - <6 months of age with fever ≥7 days w/o source
  - ≥1-day fever undergoing MIS-C labs. For reference, the CDC criteria are below.
- Requires IV/phlebotomy for ED care

The KD service is available for clinical decision making on these patients or to get involved if the provider is not a member of the recruitment team. No specific consultation is required if the patient is admitted to the PHM service without concern for KD or if the patient is discharged without concern for KD or MIS-C.

CDC Case Definition for MIS-C (available in full at https://emergency.cdc.gov/han/2020/han00432.asp):

- An individual aged <21 years presenting with
  - fever,[a]
  - laboratory evidence of inflammation,[b] and
  - evidence of clinically severe illness requiring hospitalization, with
  - multisystem (>2) organ involvement (cardiac, renal, respiratory, hematologic, gastrointestinal, dermatologic or neurological); AND
- No alternative plausible diagnoses; AND
- Positive for current or recent SARS-CoV-2 infection by RT-PCR, serology, or antigen test; or COVID-19 exposure within the 4 weeks prior to the onset of symptoms

[a]Fever >38.0°C for ≥24 hours, or report of subjective fever lasting ≥24 hours

MIS-C Update from the frontiers of RCHSD Science:

Those green top tubes that you so faithfully collect for us are fueling important science about inflammation in MIS-C vs. KD vs. febrile controls. We are learning that some of the same inflammation pathways in the innate system are activated in both KD and MIS-C. **Read: not a surprise that they can have clinical overlap!

**The serum samples are being analyzed on peptide arrays for SARS-CoV-2 antibody responses and some patients who do not make detectable antibodies to N (nucleocapsid protein, the test we have at RCHSD), do make antibodies to S (spike protein) and other non-structural proteins of SARS-CoV-2. Just when you thought it couldn't get more confusing to diagnose MIS-C!!!
We can't do this work without you. Don't forget your KD/MIS-C team when evaluating patients for possibility of either of these diseases! Either Adri Tremoulet or Jane Burns are available 24/7 if you need help enrolling. Thanks for all that you do to support this important science.

Jane C. Burns, MD
Professor and Director, Kawasaki Disease Research Center
Dept of Pediatrics UCSD School of Medicine

Updates

Scott Herskovitz, MD & Tanya Vayngortin, MD

Events:

Jim Harley's Retirement Extravaganza
When: 11/12 5pm-7pm
Where: Zoom party (Thanks COVID)
What to do: Bring your good Jim stories and sip a Starbucks in his honor (or whatever other beverage helps you cope)

Get to know your fellow faculty members!

Amy Bryl:

Personal Achievements:

- 2020 has been a year of personal survival > accomplishment, but our dog, Snoopy, helps get us through 😊
- We've been working on our house during COVID, including choosing between 18 paint colors!

Professional Achievements:

- Opioid QI Paper was finally, officially accepted to Pediatrics today!

Lukas Austin-Page:

Personal Achievements:

- Recently learned how to stand-up paddle board with my dog Toby (SUP-PUP!)
- Rode his bicycle all 545 miles from San Francisco to Los Angeles over 7 days in 2015

Professional Achievement:

- Received the Academy of Clinician Scholars (AoCS) grant to help improve the quality of healthcare delivered to LGBTQ+ patients at Rady Children's Hospital

Fellowship *Updates*

Paul Ishimine, MD and Kathryn Pade, MD

FELLOW FAMILY

- ***Goals***
  - The fellowship wants strongly to harness the energy and skills of all faculty. We believe that every faculty member has something to teach our fellows. To accomplish this end, we will be introducing the concept of the **Fellow Family**. The goal of this Family model is to have a smaller group of faculty assigned to one fellow, with the hope that this small group model allows for more meaningful social and academic mentoring relationships. Specifically, the Fellow Families are meant to help with social interaction and academic mentorship:
- ***Social***
  - Problem-solving and support: These family groups should allow for more rapid identification of both academic and social concerns.
  - Wellness: Wellness activities will emphasize team-building exercises and friendly competition among fellow families. Ideally, this would include quarterly family gatherings.
- ***Academic***
  - Increased academic collaboration: The fellows will now be required to produce a scholarly work annually (in addition to the primary scholarly project required for satisfactory fellowship completion). This can take the form of, for example, a book or electronic chapter, quality improvement project, case report, or research abstract. These smaller-scale academic projects should be ideal for collaboration among family members.
  - Review of fellow presentations: Fellows should utilize family members to review all presentations that they plan on making at out academic conferences.
  - Career counselling: The family should help with career counselling. Closer interactions with this smaller group of faculty will allow for more detailed, informative letters of recommendation (the fellow family may consider writing group letters of recommendation).

Fellowship Family Groups:

HAZBOUN	KLINE	GOMEZ
Shah, Ashish	Austin-Page, Lukas	Uya, Atim
Etkin, Marc	Conrad, Heather	Saleh, Fareed
Metcalf, Ashley	Kanegaye, John	McDaniel, Michele
Pade, Kathryn	Murray, Matthew	Wang, Yvette
		Zhan, Yan

NICHOLS	SHETH	WO
Donofrio, Joelle	Lucio, Simon	Zimmerman, Elise
Nguyen, Mylinh	Bryl, Amy	Nguyen, Margaret
Ulrich, Stacey	Hoecker, Cindy	Vane, Jackson
Gardiner, Michael	Ghafouri, Nazli	Schroter, Stephanie
Tamas, Vanessa	Vayngortin, Tatyana	Mesiwala, Adnan

Kramer	Tam
Herskovitz, Scott	Chang, Liz
Yaphockun, Karen	Mandeville, Katherine
Ishimine, Paul	Wu, Winston
Gutglass, David	Ranasuriya, Dunisha
Abe, Naomi	Shah, Seema