TIPS + TRICKS FOR THE ER

A series of hands-on, focused guidelines intended to assist community GPs in making decisions about which patients should be referred to the ER

Transitions in Care ERP-GP Working Group |
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Introduction

ER Tips and Tricks are a series of hands-on, focused guidelines intended to assist community GPs in making decisions about which patients should be referred to the ER. The tips help GPs make ER referrals more effective or avoid them entirely by providing protocols for treating and assessing patients in the community first. Tips and Tricks subjects are determined by a group of ER and community physicians, based on the experiences of both and were developed as part of the Victoria and South Island Divisions of Family Practice Transitions in Care work, funded by the Shared Care Committee.

Table of Contents

The Patient Experience

Saving Time

Sending a Patient to the ER Doesn't Mean Faster Access to Medical Imaging Equipment

"ER physicians can get any imaging studies done sooner than physicians outside the ER."

- MYTH -

The TRUTH is that aside from truly life-threatening situations (ask yourself: Is my patient going to DIE TODAY if I don't get this imaging done?), ER physicians have the same access to X-rays, ultrasounds, CTs and MRIs that community physicians have.

TIP:

DON'T send patients to the ER to "*get your imaging test done more quickly*," because all it will give your patient is a very long wait ending in frustration or distrust.

TRICK:

SAME – DAY CT is available for life-threatening conditions without sending your patient to the ER. Fill out a regular CT requisition, give it to your patient, and make sure they arrive at either hospital before 3 PM. They will be slotted in when a spot is available.

Reducing Stress

Diagnosing Patients with a New or Serious Abnormality in the ER

When your patient has an imaging test showing a new serious abnormality (i.e. cancer) in the ER…

If your patient has a test result showing a new serious abnormality they will be directed to the ER to have the results reviewed by the ER physician.

This often means your patient will be told about their new serious health issue by a complete stranger in a loud, rushed environment, which is not a great experience for either the patient or the ER physician.

What can you do?

TIP:

Write "Patient to follow up with GP for results" on the imaging requisition if you are concerned about a serious result in a NON-life threatening situation.

Improving Assessments & Avoiding Unnecessary ER Trips

Communications with the ER

The Value of Community Physician Assessments and Using the ER Fax Form

Ever had a situation where your day is packed and someone in the waiting room is REALLY sick?

Your full assessment, including vitals and physical findings, is valuable - it helps the patient to know they are being cared for and is very helpful for the ER doc. Please continue to use the fax-in form for now - we are working with our ER colleagues to redesign the form to include a section for the ERP to enter their response at the bottom to be sent back to you.

TIP:

Put your diagnosis on the referral form to help the ERP know what you're thinking.

TRICK:

If you already know the diagnosis and think they need a specialist, contact the on-call specialist directly (through the switchboard) to avoid a lengthy wait in the ER.

General

What you can do for a Patient with Newly Onset Atrial Fibrillation

If you have a patient in atrial fibrillation of unknown duration, take a step back and ask yourself, "*What can I do for them right here, right now?*"

- *Do a good history and physical exam*
- *Order a STAT ECG and creatinine*
- *Start a rate controlling agent (GOAL: to get HR>110)*
- *Anti-coagulate until assessment for possible cardioversion can be done*

TIP:

Send your patient to the ER if they are UNSTABLE:

- Active ischemia (symptomatic [e.g. angina] or electrocardiographic evidence)
- Evidence of organ hypo-perfusion (e.g. cold clammy skin, confusion, acute kidney injury)
- Severe manifestations of heart failure (e.g. pulmonary edema)

Everything else can be handled by you and your friendly neighborhood cardiologists! Don't forget that the Atrial Fibrillation Clinic provides a very thorough service for patient education and management. You are not alone!

TRICK:

Read the UpToDate section on New Onset of Atrial Fibrillation available through the VDFP website (an excellent resource), or watch this video: http://caep.ca/atrial-fibrillation-and-venous-thromboembolism-online-cpd-series

Infectious Diseases and the Outpatient Antimicrobial Therapy (OPAT) Clinic

You can call the Infectious Disease specialists at OPAT to help evaluate a patient's infection

Last week I saw a patient with a tensely swollen ear and red inflamed cheek that had started 3 days earlier after an insect bite. The skin was painful to touch and she had a low grade fever. She had been started on oral antibiotics 2 days before at a walk-in clinic and was following up with me because she wasn't improving. I knew she needed IV antibiotics but she begged me not to send her to the ER. A phone call to one of our local Infectious Disease specialists put us both at ease!

TIP:

CALL the Hospital Switchboard (250-370-8000) and ask for Infectious Disease (ID) at the Outpatient Antimicrobial Therapy (OPAT) clinic between 7:30 and 11:30 am or ask for the on-call ID outside of those hours. ID has asked that physicians call the clinic first to discuss the patient, before sending in a referral.

Often, discussing the case by phone can allow for evaluation about whether the patient needs to be seen TODAY (which may mean a first dose through the ER if outside clinic hours) or if they can wait until the next morning to be assessed and treated at the OPAT clinic.

After discussing your patient with the ID physician, you can send a referral letter by fax to 250-370-8638.

The clinic is open seven days a week from 7:30-11:30am; however, new referrals are not taken on weekends or statutory holidays. Patients need to arrive at the clinic at 7:30am for their first appointment, but subsequently they are given scheduled appointment times.

A pamphlet you can use for your patients can be found here:
http://www.viha.ca/NR/rdonlyres/C4182C38-AF28-488B-A265-394993B7EA04/0/OPAT_Patient_Instructions.pdf

TRICK:

Did you know - OPAT is also the contact point for outpatients who may be eligible for home IV therapy. This program provides assessment, education, and support for patients undergoing intravenous therapy who could recover at home. For more information or to refer a patient, call the OPAT clinic physician at (250)-370-8000.

Obstetrics

Evaluating a Pregnant Woman Who's Bleeding

"Help! What do I do with a pregnant woman who's bleeding?"

For those of us who don't do obstetrical medicine, seeing a woman with a first trimester bleed can be stressful and perplexing. Sometimes, the ER is just the right place for her to go, but often GPs can safely manage the initial evaluation, which is especially important to patients at a highly emotional time.

If the patient has light or moderate bleeding with cramping similar to a period:

- Order a CBC, Rh factor and serial quantitative bhCG, as well as a pelvic U/S
- TransVAGINAL pelvic ultrasound can be done through Medical Imaging or the Vancouver Island Women's Clinic within 24-48 hours – as early as 4.5 weeks GA (when the bhCG>1500)
- TransABDOMINAL works for bhCG 2500

Tips & Tricks

TIPS:

- You really need the ultrasound for dates to properly evaluate bHCG. A serial bHCG that does not rise by at least 50% after 48 hours is concerning PRIOR TO 8-9 weeks GA, when the levels can plateau and slightly decrease.
- Rh factor should be done at the HOSPITAL lab, as Life Labs results can take up to a week. RHIG (WinRHO) should be administered within 72 hours through the Vancouver Island Women's Clinic, the VGH CFAU, or the ER if required.

What about On Call?

If you get a call from a patient after hours, this workup can be arranged for the following day when you are back in the office, with instructions to go to the ER if things worsen.

When to send to the ER:

- The patient is having heavy bleeding (changing a pad every 30-60 minutes for more than 3 hrs)
- There is severe pain/cramping
- The patient experiences presyncope/syncope

If the patient is in your office and unstable, call 911 for transfer to the ER.

Remember: 5-10 weeks GA is the critical point for ectopic pregnancy. Severe pain and bleeding = ER!

TRICK:

During regular office hours, the Vancouver Island Women's Clinic takes referrals to evaluate, monitor and manage miscarriages. They usually see patients within 1-2 days of your call.

- Clinic phone number: (250)–480–7338
- On Call doctor: (250)–661–0908

For bleeding AFTER the first trimester in ANY patient, call Gynecology on call and send the patient to the hospital for urgent ultrasound and assessment.

Children & Youth

Knowing When Head Injuries Require a CT Scan (Ages 0-18 yrs.)

Head injuries: Is a CT needed or can they be safely monitored in the community?

While visiting a friend during medical school who had already braved the world of parenthood, I watched his lovely little baby observe her surroundings from her seated spot on the thickly carpeted floor. When the little one lost her balance and slowly fell back onto her head, we heard a soft thunk - to which my friend cheekily commented, "Well, there goes law school!"

We laughed at the time, but head injuries in children have to be one of the most upsetting situations for parents, which makes our job of assessing and accurately treating head injured children even more important.

We all recognize that children who remain unconscious; have signs of bleeding (from ears or nose); or who have a focal neurological deficit should be sent to the ER immediately - by ambulance.

Helpful Resources:

Here are some helpful resources for managing head injuries in children:

- For evidence-based algorithms for ordering a head CT in children under AND over two years of age, visit: http://californiaacep.org/improving-health/pecarn/
- A handy resource for parents on head injury basics can be found here: http://www.bcchildrens.ca/Resource-Centre-site/Documents/D-E/BCCH1001_HeadInjury_2014.pdf
- For a GREAT one-page reference on Return to Play AND Learning, visit: http://www.saferhockey.com/pdf/Generic%20Concussion%20Management.pdf
- Parachute Canada is another very good resource for injury prevention information: www.parachutecanada.org

TIP:

For head injuries that occur in children older than two years due to falls from a standing height or sports-related head injuries, a head CT scan is NOT required if they have the following signs:

- Awake, talking, and walking;
- Less than two episodes of vomiting;
- Mild headache, and
- A normal neurological response.

This is the case EVEN WITH a history of a transient loss of consciousness. Feel confident to monitor these kids in the community. If there is a neurological change or recurrent episodes of vomiting, then refer to the ER. It's helpful to know that 95% of epidural bleeding will happen less than 4 hours from the time of injury.

New Recommendations for Managing Cough, Bark and Wheeze in Kids

Tis the season of the ABC's – Asthma, Bronchiolitis and Croup – Managing kids with coughs

Our ER colleagues have shared a GREAT Canadian website for assessment and treatment of pediatric medical conditions: www.trekk.ca. You don't need to log in – just type and search for great, concise recommendations.

TIPS:

- For kids with moderate **ASTHMA** exacerbation, consider adding a single dose of oral dexamethasone (0.15 – 0.3 mg/kg) to their inhaled regimen. This has been shown to significantly decrease respiratory distress within 2 – 6 hours and decrease admissions to hospital (*Link to a scoring tool for mild-moderate-severe also on the website*).
- **BRONCHIOLITIS** most commonly hits your really young patients – most under age two, but especially under 12 months. If you have a child less than 12 months old, with a first episode of wheeze in the winter months, it's likely bronchiolitis and should NOT be treated with Ventolin, Atrovent, inhaled steroids, antibiotics, hypertonic saline or systemic corticosteroids. **SUPPORT** and **MONITORING** are the main treatments.
- For that youngster with acute onset of barky cough, **CROUP** is the likely cause. New recommendations state that ALL kids with croup should have a single dose of oral dexamethasone at 0.15 – 0.6 mg/kg (max 10 mg).

Staying Prepared

Improving Your Procedural Skills

Minor Lacerations and Minor I + Ds of Infected Cysts or Abscesses

Be brave and improve your skills by doing office procedures!

Community family physicians can often deal with minor lacerations and minor I + Ds of infected cysts or abscesses in the office, even in children. It can throw your schedule off kilter, but it's a good chance to keep up those procedural skills!

Don't be afraid, and make use of your office staff to support you!

TIP:

If you think the patient needs sedation for the procedure, keep them NPO and send them into the ER.

TRICK:

If you feel you would like to improve your skills in lacerations and I + Ds (we all get a little rusty on some things), check out St. Paul's CME courses on ER or Rural Family Practice – they often have hands-on sessions dedicated to improving procedural skills.

Treating Patients While Awaiting EMS

Dealing with Life-Threatening Asthma Attacks

We all dread it; the asthma patient who comes into the office wheezing and struggling to breathe…

Your first thought is likely to be 'This person needs to get to the ER immediately!" And yes, if your patient is having a severe life-threatening asthma attach, the ER is the best place for them. Here's what to do while you wait for EMS to arrive:

TIP:

Administer Ventolin/salbutamol (ideally with a spacer) 2-6 puffs every 20 min for the first hour. Monitor the patient closely and continue treatment until peak flow readings improve to > 60-80% of the patient's best/expected level.

Give oral corticosteroids EARLY to patients who are deteriorating quickly, not responding to Ventolin, or who have already increased their inhaler doses before arriving. (Prednisone 1 mg/kg/day to max 60 mg for 5-7 days; or dexamethasone 0.3-0.6 mg/kg/day to max 16 mg with one repeat in 24-36 hours (from UpToDate)).

Patient getting better? Review Asthma Action Plan, discuss how to monitor symptoms, observe inhaler technique, talk about what to do if symptoms worsen, and schedule a follow-up appointment for 1 week. Increase inhaled steroid for 2-4 weeks, or start one if they aren't already on it. Consider giving an oral steroid prescription to take home for frequent exacerbations.

Patient getting transferred to the ER? Be ready to reassess them in the office in 2-7 days.

TRICK:

Long before any asthma patient arrives at your office experiencing respiratory difficulties, it is important to take stock of what you have on hand to rapidly relieve their symptoms. Be sure to have Ventolin with a chamber, oral corticosteroids and controlled oxygen (tubing and nasal prongs) in the office. It is much better to have them at the ready and never need them than to NOT have them when your patient with asthma arrives in distress!

Printed instructions for all types of inhalers are found on the asthma.ca website: http://www.asthma.ca/adults/treatment/howToUse.php

Signed up for Pathways? Inhaler education videos are available on https://pathwaysbc.ca/ under Resources → Patient Information → Respiratory. You can email the videos directly to your patient from the Pathways website.

Preparing Ahead for Anaphylaxis

EpiPens and Emergency Kits

Your MOA has just fit in an 8 year old patient and her parents, stating that the child appears anxious with very swollen lips and eyes. When you see her, you note wheals and redness on her neck and chest. You are certain she is having an allergic reaction and are now on high alert for anaphylaxis. She complains that her tongue feels tingly and she is having some difficulty breathing.

TIP:

Prepare ahead! – This is when you jump into action and quickly grab the emergency kit you have prepared for events just like this. Ask your MOA to call 911.

With your airway support equipment at the ready, give epinephrine 0.15 mg (for kids up to 30kg/66 lbs) intramuscularly into the thigh. Dosing for kids over 30kg and adults is 0.3 mg IM; consider smaller dosing for frail elderly or high CV risk patients. Watch for signs of improvement and redose in 5 minutes if worsening.

TRICK:

You did it! – While your patient is improving and you are waiting for the ambulance to arrive to transfer your patient to the ER for observation, prepare and discuss a prescription for 2 EpiPens to have available for immediate use if this situation occurs again. It's a good idea to have a practice kit in your office to let patients see and feel how to use it. Free kits can be easily ordered: https://www.epipen.ca/en/epipen-resources/epipen-starter-kit-and-organization-kit/order-your-starter-kit-or-org-kit

Book a follow-up appointment to review the proper use of the EpiPen and explore what allergen may have precipitated the event.

For a video demonstration that will teach your patient and their parents how to use an EpiPen, visit: https://www.youtube.com/watch?v=FXlqSuzzrws

Hassle Reducers

Critical INRs Made Easy

"I hate the on-call critical INR"

You're standing in the horse paddock at your horse-crazy daughter's first riding lesson, when the lab calls with a critical INR. It takes 25 minutes to contact the patient and sort it all out.

Isn't it tempting just to send them to the ER? ***DON'T GIVE IN!***

TIP:

- If INR is 5.0 – 9.0 WITHOUT bleeding → No fuss! Just hold 2 doses and decrease the weekly dose by 10-20%
- If INR is > 9.0 WITHOUT bleeding → Stop the warfarin, consider giving one dose of vitamin K 2.5 mg orally, and repeat some vitamin K dose in 24 hours if INR still greater than 9.0. Resume warfarin when INR is therapeutic and reduce weekly dose by 20%
- If there is any bleeding with an INR > 3.6, your patient needs assessment at the ER
- Haven't been able to find vitamin K in the community? Call any

NEW TRICK:

Haven't been able to find vitamin K in the community? Call any Shoppers Drug Mart and order vitamin K 2.5 mg (¼ ampule) orally.

We have recently engages the local managers at all Greater Victoria Shoppers Drug Marts to routinely stock vitamin K for this purpose, so if you have not had any luck before now, please give it another shot next time!

Homemade Solution: Eyelid Viewing Technique

An ER Doc's solution to looking UNDER eyelids…

We've all had the awkward and frustrating experience of trying to look under someone's eyelid. There are several available techniques – grab the eyelashes, flip the lid over a Q-tip/stick, etc. – With varying degrees of success.

What can you do?

TRICK:

Our local ER docs have shared a crafty, homemade solution for this touchy issue using a large paperclip and a light source.

Check out our very own Drs. Steve Wheeler and Brian Farrell demonstrating their eyelid viewing technique: https://youtu.be/PrEVzj5wU2Y

(With thanks to Dr. Bruce Campana for sharing the video)

Nasal Obstructions in Children: The 'Parent Kiss' Technique

A Family-Involved Technique for Removing Foreign Bodies from a Child's Nose

True story: *Our main boat motor had broken down so we had to putt along for 4.5 hours on our little motor with a nine and six year old squeezed somewhere in between a week's worth of gear. At the fairly squirrelly four-hour mark, I looked over at our six-year-old son, who was silently grinning from ear to ear with two brown almonds just barely protruding from his nostrils….*

It remains a mystery WHY kids put things in their nose, but it is no longer a mystery how to get it out! Check out this family-involved technique for removing a foreign body from a child's nose using a parent's "kiss." It works about 60% of the time, but should always be done under medical supervision due to the risk of aspiration (as with any removal of foreign body) and the theoretical risk of barotrauma to the ears and lungs.

How to perform the '*parent kiss*':

The procedure should be fully explained to the parent (or other trusted adult) and the child told they will be given a 'big kiss'. In order to expel the foreign body, the parent then:

1. Places their mouth over the child's open mouth, forming a firm seal as if performing mouth-to-mouth resuscitation
2. Occludes the unaffected nostril with a finger
3. Blows until they feel resistance caused by the closure of the child;s glottis
4. Then gives a shart exhalation to deliver a short puff of air into the child's mouth (which passes through the nasopharynx and out through the unoccluded nostril)
5. If necessary, the procedure can be repeated a number of times

For more information see: http://www.racgp.org.au/afp/2013/may/mothers-kiss/

Reducing Nausea: Inhaling Isopropyl Alcohol Technique

Quick Relieve from Nausea Using a Packet from your Pocket

The ubiquitous alcohol swab: This folk remedy from South America is a quick and easy way to help nauseous patients feel better. How easy is it? Sit your patient down with an emesis tray at the ready. Have your patient do 3 nasal inhalations (in through the nose - out through the mouth) from an opened alcohol swab every 15 minutes, with 2 repeats if necessary.

Did You Know?

The use of inhaled isopropyl alcohol has interestingly been well-studied in anesthesia literature showing at least a **50% decrease in the severity of nausea within 10 minutes**, which is 20 minutes faster than IV ondansetron! Even a 2012 Cochrane Review concluded that isopropyl alcohol was effective in reducing the need for rescue anti-emetics; but it is NOT RECOMMENDED IN CHILDREN as it just too noxiously stinky for kids. With no reported adverse reactions in adults, this inhaled vapor is extremely cheap and readily available.

If you want to know more, please visit:

https://www.aliem.com/2015/trick-trade-isopropyl-alcohol-vapor-inhalation-nausea-vomiting/

Easily Fixing a Dislocated Radial Head in Children

"True wisdom is knowing what you don't know" - Confucius

When I started medical school, I thought that medicine was like math; all you needed to do was learn the equations, apply the symptoms, and the diagnosis and treatment would magically appear every time.

Needless to say, it didn't take long for me to figure out that medicine is much more complex, with ever-changing evidence and varying opinions. As the volume of medical information continues to increase, it is always tempting to hold tight to those things we KNOW as it gives us a sense of mastery, confidence and eases the brain strain for a while.

TIP:

We've all had that experience of confidently declaring a treatment only to find out that there is something new (and hopefully better) that has taken its place.

This month's ER Tip and Trick is a little one of those; your ER colleagues are sharing this easy to follow video on the latest, greatest method of fixing a dislocated radial head in children. To see how it works, please visit:

https://www.youtube.com/watch?v=3XcDUQ7s62s&feature=youtu.be&list=PLM7bcr9dpH9BHbi5awnLAGpxgk8PvwfuO

Using Pathways to Easily Find Outpatient Clinics

Frazzled and frustrated trying to figure out which specialties have what clinics? Not sure if you can refer to them directly?

Sometimes we end up sending our patients to the Emergency Department for care that can be arranged in the community because we just don't know what's out there. It's hard to remember which services have to be arranged through an inpatient MRP and which ones community GPs can refer to regardless of what privileges they hold.

*Well, good news! The **Victoria Division's Pathways site can help**. There are 20 outpatient clinics that you can refer to directly listed in Pathways – and you don't have to memorize them.* All you have to do is log on to Pathways and search the word "**outpatient**". *Easy!*

Clinics Include:

- Anticoagulation Therapy (ATC)
- Atrial Fibrillation
- Cardiac Rehabilitation (RJH)
- Colposcopy
- Cutaneous Surgery (RJH)
- Flexible Sigmoidoscopy (RJH)
- Gestational Diabetes (VGH)
- Heart Function (RJH)
- Lower Leg Wound (FLUC, RJH)
- Medical Daycare (RJH)
- Neuro-Rehabilitation/ Rehab Medicine (VGH)
- Outpatient Antimicrobial Therapy (OPAT, RJH)
- Pain Management (RJH)
- Pressure Injury Access (RJH)
- Pulmonary Function Lab (RJH)
- Respiratory Education Centre (RJH)
- Seniors Outpatient Clinic (SOPC)
- Stroke Rapid Assessment Unit (SRAU)
- Urgent Medical Assessment (UMAC)
- Urgent Vascular Limb (RJH)

TIPS:

Detox services in the community (on Pembroke Street) are not listed as outpatient services; you can find the referral pathway for detox by looking under Addiction as a specialty.

Pathways contains information about clinics that are physician-led. Allied health clinics, such as the Tall Tree Concussion Program, are not included (for more information on that program and to access their resources, you can visit their website at concussion.talltreehealth.ca/doctors).

So how do you access Pathways? If you don't already have a log in, you can contact Cherith Golightly at Victoria@PathwaysBC.ca. She will get you set up!

TRICK:

You can also find these clinics by searching the appropriate specialty (e.g. find the Pulmonary Function Lab under Respirology).