Family Physician/Specialist Engagement Event
May 9, 2013

FISHING for PEARLS

Dr. Andrew Attwell, Oncologist

1. Alcohol consumption > 1 drink per day increases the risk of breast cancer in post-menopausal women.

2. Men with advanced prostate cancer on androgen deprivation have hemoglobin levels in the female range and are at increased risk of osteoporosis and CVD.

3. Fever in a patient on chemotherapy requires detailed and urgent evaluation (and the involvement of a medical oncology team member).

4. Imaging (beyond mammography) and lab work is not indicated in asymptomatic patients after localized breast cancer.

5. Patients with malignant gliomas are at high risk for thromboembolic complications.

Dr, Kristen Attwell-Pope, Neurologist

1. If an elderly person has a “moderate” risk of falls, they would need to have 300 falls in one year to have their risk of sub-dural hematoma outweigh the benefit for stroke prevention when treated with warfarin for atrial fibrillation.

2. ASA has no proven benefit for the prevention of cardio-embolic stroke in individuals with atrial fibrillation.

3. Relapsing Remitting MS is treatable disease.

4. There is no proven benefit to delaying the initiation of dopaminergic medication in the treatment of Parkinson’s disease.

5. Exercise is the only proven neuro-protective therapy.

Dr. Richard Backus, Sports Medicine Specialist

1. You are worried about an Achilles, patellar tendon, distal biceps rupture, and the ultrasound says there are fibers present so it is a partial tear only: it is complete! Refer ASAP

2. A 55+ year old has clinical findings of meniscus tear - they do. Any joint narrowing on STANDING AP or tunnel tells you why - degeneration. Do they need surgery? Only if there are mechanical symptoms - locking, giving way. Do they need MRI? Almost never. They need a bicycle.

3. A 12 to29 year old has knee pain with swelling following an acute episode, often without contact, which is an ACL tear (80%) or bone edema (95%) so refer medium urgency and get an MRI.

4. A 60 year old with shoulder impingement symptoms and external rotation weakness has a partial rotator cuff tear, along with 30% of the asymptomatic population. Get an ultrasound, and if you can get them pain free with exercise and injection, simply follow up with US in 5 year, or after acute exacerbation. Refer for persistent pain.

Dr. Eric Fretz, Cardiologist

1 . When evaluating a systolic murmur listen to the right acromium process. If it radiates there it is aortic stenosis.

2. Hand gestures are extremely important it distinguishing angina from other causes of chest pain. An open palm applied or pressed to the sternal area is an excellent description of angina whereas the closed fist (Levine's sign) implies eosopheal spasm. Fingertips are less worrisome.

3. The genes for hypertension, dyslipidemia and diabetes all cluster. When one is present EXPECT the eventual development of the others. Consider Framingham or Reynolds scoring in all cases when one of these is present.
   Tiebreaker additional tests include Apo A and B100 or CRP.
   CRP does not cluster with the above risk factors and adds independent risk.

Dr. Sonja Mathes, Orthopedic Surgeon

1. There are few (if any) indications to surgically resect a Baker's cyst.

2. Isolated AC Joint arthritis is relatively rare, unless truly post traumatic.

3. In evaluating the older (>75y/o) patient with clinical rotator cuff tear, an x-ray can often confirm the diagnosis without the need for an ultrasound.

4. Frozen shoulder is relatively uncommon in patients over 60.

5. Cosmesis is not an indication for bunion surgery.

6. Hip arthritis tends to have a very predictable pattern of steady deterioration while knee arthritis is far more prone to symptom flares.

Dr. Christopher Morrow, Emergency Physician -

1. High Sensitivity Troponin: What is this? How is it different? How do we use it?
2. D Dimer: a rule-out test for those at low probability for PE.
3. CHA2DS2-VASc, PERC rule, Well's Criteria, Canadian C spine rule, Canadian CT head rule: cookbook medicine or excellent support for your clinical acumen?
4. Yes, we want to talk to you, but sometimes we just can't!
5. Patient Focused Funding in the ED: No, we don't get the cash and no, we don't rush your patients out...
6. Ultrasound? What ultrasound? Limited resources in the ED.
7. C spines: if you are clinically concerned, CT is the only way...
8. Post arrest hypothermia: literally the coolest change in resuscitation management
9. CPR and ACLS is all about the chest compressions...
10. ED ultrasound: What an ERP can and cannot do...

Dr. Kim Northcott, Rheumatologist

Pearl #1: An ANA is not a disease activity marker in lupus, and only needs to be ordered once to establish the diagnosis.

String of Pearls:

- An ANA is an autoantibody targeted against normal proteins within the nucleus of the white blood cell. There are 3 parts to the test: 1. Positive or negative; 2. titer; 3. pattern of fluorescence. The threshold for a positive titer varies according to the lab.
- By itself, a positive ANA does not indicate the presence of an autoimmune disease nor the need for therapy.
- Its sensitivity and specificity makes it a useful screening test for lupus. At least 95% of patients with lupus will have a positive test. The small percentage of lupus patients with a negative ANA will typically have a positive SS-A/anti-Ro antibody. A negative test is helpful in excluding the diagnosis.
- Only about 11-13% of people with a positive ANA have lupus.
- Up to 15% of healthy individuals have a positive test. Prevalence increases with age and is estimated to occur in 10-37% of patients over the age of 65.
- A positive ANA can be seen transiently with viral infections, other rheumatic diseases, and organ-specific autoimmune disease including thyroid disease (Hashimoto's thyroiditis and Graves' disease), gastrointestinal disease (autoimmune hepatitis, primary biliary cirrhosis, and inflammatory bowel disease), and pulmonary disease (idiopathic pulmonary fibrosis).
- An ANA should only be ordered when symptoms and signs suggest a significant clinical possibility of a connective tissue disease (for example, the presence of arthritis, serositis, photosensitivity or rashes, active sediment or a renal disorder, and cytopenias that are unexplained by other causes). An ANA should not be ordered for back pain or fatigue alone.
- In patients with a diagnosed connective tissue disease, a positive ANA does not need to be repeated as titres do not correlate with disease activity.
- A negative ANA only needs to be repeated if there is a strong suspicion of an evolving connective tissue disease, or if there is a change in the patient's clinical status to suggest a new diagnosis.

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Pearl #2: Methotrexate doses used for inflammatory arthritis are immunomodulatory, and cannot be equated to the immunosuppressive doses used in chemotherapy

String of Pearls:

- Methotrexate is typically the first line treatment for rheumatoid arthritis and has been in widespread use since the 1980s
- Methotrexate is considered the anchor for combination therapy when methotrexate therapy alone does not achieve disease control.
- Higher efficacy and less gastrointestinal toxicity occur with parenteral versus oral methotrexate.
- A metaanalysis reported that patients remain on methotrexate significantly longer than other DMARDs because of its sustained efficacy and tolerability. Methotrexate is less often discontinued because of toxicity when compared to other DMARDs. Long-term methotrexate use is not associated with an increased risk of serious infections.
- A separate meta-analysis reported that rheumatoid arthritis patients on methotrexate were at less risk of infection possibly due to its ability to regulate the immune system to correct any disturbance and thus allow the immune system to resume its surveillance role.
- The greatest predictors of infection in rheumatoid arthritis are: 1. Advanced age; 2. comorbidities such as diabetes mellitus; 3. corticosteroid use.
- Therapy with low doses of methotrexate (≤0.4mg/kg/week) for treatment of rheumatoid arthritis is not considered to be sufficiently immunosuppressive to create vaccine safety concerns and is not a contraindication for administration of the live zoster vaccine.
- Methotrexate can be safely continued in the perioperative period in rheumatoid arthritis patients undergoing elective orthopedic surgery. Continuing methotrexate has been shown in randomized controlled trials to make no difference in post operative complications, and is associated with significantly less rheumatoid arthritis flares when compared to stopping methotrexate 1 or 2 weeks prior to surgery.
- Rheumatoid arthritis patients on methotrexate compared to patients without methotrexate have a lower overall mortality incidence rate and reduced cardiovascular mortality.

Con't

Pearl #3: Traditional Disease Modifying Anti-Rheumatic Drugs (DMARDs) are not effective treatment for inflammatory back pain

String of Pearls:

- The mainstay of pharmaceutical treatment in ankylosing spondylitis is NSAIDs. However, they are ineffective in altering the natural course of the disease.
- TNFα inhibitors represent a major break-through in management of inflammatory back pain when NSAIDs are either ineffective or not tolerated and patients continue to experience moderate to severe symptoms. They have been shown to improve symptoms, and indices including the BASDAI (Bath Ankylosing Spondylitis Disease Activity Index) and ASAS (Assessment of SpondyloArthritis International Society) responses. However, TNFα inhibitors are associated with a significantly greater cost and side effects.
- Data for the efficacy of common DMARDs (eg. methotrexate, sulphasalazine, hydroxychloroquine, and leflunomide) in the treatment of inflammatory back pain is lacking.
- Sulphasalazine is the most well studied and has shown variable results of response and benefit. A Cochrane review of 11 studies containing close to 900 patients showed that sulfasalazine 2-3 g p.o. daily could improve morning stiffness and lower ESR measurements, but was not shown to improve pain, physical function, spinal movement/metrology measurements, or overall well-being compared to placebo.
- Large well-controlled trials for methotrexate are lacking, but available data shows no efficacy.
- There is inadequate data for the role of hydroxychloroquine.
- A controlled trial of leflunomide in ankylosing spondylitis reported no benefit.
- The role for traditional DMARDs in ankylosing spondylitis remains confined to the management of peripheral joint inflammatory arthritis, and certain extra-articular manifestations such as psoriasis, uveitis, and inflammatory bowel disease.

Dr. Justin Shah, Gastroenterologist

1. Patients born between 1945 and 1965 should be screened for Hepatitis C
2. New treatments have greatly improved cure rates for Hepatitis C
3. Always order an IgA level when checking an anti-TTG titre
4. PEG 3350 solution is a good treatment for constipation
5. Fecal calprotectin testing can be helpful in ruling out inflammatory bowel disease

Dr. Gerald Tevaarwerk, Endocrinologist

1. Many drugs, supplements, foods and drinks interfere with the absorption of thyroxine: *the stomach must have been empty for four hours and remain empty for one hour after the thyroid preparation has been taken with a few swallows of water*. For many patients a convenient way is to take it during the night when they wake up to use the bathroom, having put it out beside the sink upon retiring.

2. The best test for hyperandrogenism in women is not testosterone but androstenedione.

3. *"Adrenal fatigue"* does not exist and inadequate or excessive cortisol production can be ruled out clinically by looking at the skin colour and fat distribution.

4. An early morning plasma cortisol is a useful test to rule out hypocortisolism but useless to rule out excessive cortisol production: for that a 24-hour urine collection for urinary free cortisol, corrected for creatinine excretion, is needed.

5. A suppressed TSH does not equate with "thyrotoxicosis": the free T4 and free T3 must be elevated to make that diagnosis.

Dr. Brian Weinerman, Oncologist

1. If a patient says he is bleeding a negative FIT rules this out.
2. Colongraphy is a good screening tool.
3. Specific genetics still do not play any part in cancer therapy
4. All colon cancer is the same stage for stage
5. All screening for cancer is a good idea
6. Gastric cancer started falling in our society with the medical invention of the refrigerator.

Dr. Rivian Weinerman, Psychiatrist

1. Personality disorders, especially borderline personalities can be helped by listening hearing and validating not jumping in to fix or rescue.

2. Never give in to supporting the splitting that your borderline personalities might engage in because o f their developmental fixation.

3. Asking the questions of suicide and Post Traumatic Stress Disorder does not create any problems, in fact they give the opportunity to resolve them.

4. Ask the patient what is the percentage chance they will follow up with your treatment plan – less than 75% needs to be renegotiated.

5. Ask the patient what they think will work best to address their problems, giving them a selection of choices.

Dr. David Yaxley, Psychiatrist

1. **Sleep compression**.

- Long-standing severe initial insomnia may need in addition to regular management with reviewing sleep hygiene and basic CBT for insomnia, a period of sleep compression.

- Most important thing is keeping the same wake-up time seven days a week and restricting the person from going to bed until the time that they are falling asleep currently.

- If they are a terrible historian start them off with six hours and see them weekly to encourage, coach and monitor for 90% sleep efficiency before expanding sleep time by 15 min. increments.

- Very high success rate and most people can get off all hypnotics.

2. **Motivational interviewing with compassion, not an argument!**

- acing a patient with a challenging health behavior, smoking drinking eating, you name it, find your inner compassion for how this person's life and health may change depending on their choices and from this centered quiet place inside of yourself gently hold the focus on this topic and help them see what they like about this behavior and what they may not like if it continues.

- Like jujitsu, never oppose force, if they like the smoking explore all the benefits with them genuinely until they start to point out some of their concerns when they see and **feel that you are not resisting them**!

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- It's okay to gently ask from a centered place if they have any concerns but if they have none at this point ask them to think about it and book another appointment explicitly for that purpose of further discussion coming from a place of caring in your heart.

- This is so much **better for your blood pressure** than lecturing and people pick up on it and if in a stage where they could possibly benefit from further change discussions will be back.

3. **Treatment of depression**

- Help the person see that these terrible feelings of depression make sense as a form of stress indicating that the current life being lived is unsustainable.

- Suicidal thoughts in this context are a way out of suffering and can be used in future by the person as an indicator, just like a temperature gauge in the dashboard of your car, of just how stressed they are on a given day or in a situation.

- Agree with them that indeed **something needs to die, but it is not the person, but the intolerable situation of being so rundown and physiologically ill accompanied with negative self depreciating thoughts that "needs to die".**

- **Health needs to return! You will help them!**

- Helping the person to take action with small steps in anything that gives them any tiny sense of beginning control over their life or their thoughts or whatever the situation may be or often just your hanging in there with them and sharing the experience and commitment to helping them find a way through it is the beginning.

- This is why the placebo effect of antidepressants is so powerful (in addition to the smaller but potentially helpful pharmacological effect especially with more severe depression or).