Hello!

With summer coming, heart longs for those school holidays, when there really was nothing to do, but spend great afternoons with friends. Growing up, we have left all those things behind. But I guess many of us will compensate by planning an escape into the cooler hill stations; if you are one of those lucky ones, accept my 'Bon Voyage' and have a nice time.

Don't forget to call me to see your photos, when you are back! Alas, it is time to for us to get back to medicine …

This time let us discuss - A) Guessing the blood sugar by patients B) Serology for celiac disease. C) Accuracy of clinical and laboratory parameters in community-acquired Pneumonia. D) Fecal candida and diarrhoea

Can diabetic patients guess their blood sugar?

Time and again regular diabetics argue that their blood sugar can not be that high or that low and lab surely has goofed up. I have difficult time explaining them the intricacies of lab testing and how we have checked and double checked everything, but still the patients may not be convinced.

But can they really guess their sugars? This study from British Journal of Family Practice proves that no, they can not guess it.

So, next time patient argues with you regarding the sugar levels, tell him that though he knows his body well, God has not given us the ability to guess our own sugars. Check out the details on ***Page 2***

Pre-endoscopy serological testing for coeliac disease: evaluation of a clinical decision tool

I think the laboratory professionals should take the initiative in finding out and discussing the best diagnostic modalities. Towards that effort let us discuss this and next article related to diagnosis of celiac disease and pneumonia respectively.

This study found that the sensitivity, specificity, positive predictive value, and negative predictive value for positive result for antibodies to tissue transglutaminase, to diagnose coeliac disease was 90.9%, 90.9%, 28.6%, and 99.6%, respectively. Check out rest of the abstract from BMJ on ***page 3***.

Diagnostic and prognostic accuracy of clinical and laboratory parameters in community-acquired Pneumonia.

Community-acquired pneumonia (CAP) is the most frequent infection-related cause of death. The reference standard to diagnose CAP is a new infiltrate on chest radiograph in the presence of recently acquired respiratory signs and symptoms.

This study aims to evaluate the diagnostic and prognostic accuracy of clinical signs and symptoms and laboratory biomarkers for CAP. Check out the details on ***page 4.***

Faecal candida and diarrhoea.

Some times so many yeast cells are seen in the stool that I wonder whether they are pathogenic. And on occasion, clinician also asks whether yeast cells are seen in the stool sample.

I was speculating on the significance of yeast cells in the stool; fortunately I found this article, and it concludes that Candida species do not cause childhood diarrhoea in well nourished children. ***Details on Page 5***

Also in this issue ….

Usual features like links to interesting cases on page 2, Some interesting web resources on page3, Jokes on page 4 and Parting Thought by on last page.

.This is it for this month, have a great summer!

Thanks and regards,

_____***Sachin***

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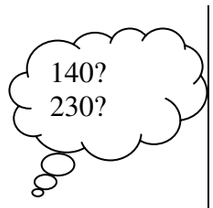
Leave your ***comments*** *or check others at –*
http://sachinkale1.tripod.com/comments.htm
(1, Cont.)

The closer look at health…

A humble effort towards understanding medical science & becoming a deserving member of robust, science based medical community.

Br J Gen Pract. 2005 December 1; 55(521): 944–948.

Estimation of blood glucose levels by people with diabetes: a cross-sectional study



- To explore whether people with diabetes can accurately estimate their blood glucose levels and to assess which factors explain variability in these estimates.
- One hundred and fifteen consecutive patients with diabetes attending a diabetic clinic were invited to estimate their blood glucose level prior to having it routinely measured.
- One hundred and four patients made estimates.
- Of these, 45 (43.3%) underestimated their blood glucose, 18 (17.3%) overestimated, and 41 (39.4%) made guesses that fell into the range defined as accurate.
- Of those not using insulin (n = 85), 37 (43.5%) underestimated their blood glucose, 12 (14%) overestimated and 36 (42.3%) were accurate.
- Accuracy in the non-insulin users was associated with home testing, lower blood glucose levels, coming to the clinic in a fasting state, and reporting no symptoms when they felt that their blood glucose level was high.
- Overestimation was associated with having co-occurring illnesses and experiencing no symptoms when their blood glucose was low.
- The majority of patients with diabetes in this study could not accurately estimate their blood glucose levels indicating that home testing may be a necessary part of diabetes self care. Home testing may also function as a form of biofeedback to facilitate an improved ability to estimate blood glucose levels.

Interesting Cases

These are some cases, gross & microscopic picture and telepathology discussion of which, might prove interesting -

1. Skin biopsy showing Molluscum contagiosum
   http://telepath.patho.unibas.ch/ipath/object/view/115512

2. Verruca vulgaris gross and microscopic images -
   http://telepath.patho.unibas.ch/ipath/object/view/119782

3. Thyroid lump; FNAC impression: Papillary lesion; suspicious of malignancy
   http://telepath.patho.unibas.ch/ipath/object/view/120354

4. Histopathology of excised specimen of above case proved the diagnosis of Papillary carcinoma thyroid – Check out beautiful gross and microscopic images at -
   http://telepath.patho.unibas.ch/ipath/object/view/122692

5. Renal cell carcinoma – Nephrectomy specimen and nice images of conventional clear cell variant of renal cell carinoma at – http://telepath.patho.unibas.ch/ipath/object/view/118816

6. Sebaceous carcinoma of eyelid gross and microscopic at –
   http://telepath.patho.unibas.ch/ipath/object/view/117084

(2, Cont.)

BMJ. 2007 April 7; 334(7596): 729.

Pre-endoscopy serological testing for coeliac disease: evaluation of a clinical decision tool

- To determine an effective diagnostic method of detecting all cases of coeliac disease in patients referred for gastroscopy without performing routine duodenal biopsy.
- An initial retrospective cohort of patients attending for gastroscopy was analysed to derive a clinical decision tool that could increase the detection of coeliac disease without performing routine duodenal biopsy.
- The tool incorporated serology (measuring antibodies to tissue transglutaminase) and stratifying patients according to their referral symptoms (patients were classified as having a “high risk” or “low risk” of coeliac disease).
- The decision tool was then tested on a second cohort of patients attending for gastroscopy. In the second cohort all patients had a routine duodenal biopsy and serology performed.
- 2000 consecutive adult patients referred for gastroscopy recruited prospectively.
- Evaluation of a clinical decision tool using patients' referral symptoms, tissue transglutaminase antibody results, and duodenal biopsy results was done.
- No cases of coeliac disease were missed by the pre-endoscopy testing algorithm.
- The prevalence of coeliac disease in patients attending for endoscopy was 3.9% (77/2000, 95% confidence interval 3.1% to 4.8%).
- The prevalence in the high risk and low risk groups was 9.6% (71/739, 7.7% to 12.0%) and 0.5% (6/1261, 0.2% to 1.0%).
- The prevalence of coeliac disease in patients who were negative for tissue transglutaminase antibody was 0.4% (7/2000).
- The sensitivity, specificity, positive predictive value, and negative predictive value for a positive antibody result to diagnose coeliac disease was 90.9%, 90.9%, 28.6%, and 99.6%, respectively.
- Evaluation of the clinical decision tool gave a sensitivity, specificity, positive predictive value, and negative predictive value of 100%, 60.8%, 9.3%, and 100%, respectively.
- Pre-endoscopy serological testing in combination with biopsy of high risk cases detected all cases of coeliac disease. The use of this decision tool may enable the endoscopist to target patients who need a duodenal biopsy.

Internet under Microscope: Some useful resources

Good source for free software -

If you are like me and like freebies from the net check out this site from some cool suggestions -

http://freewarewiki.pbwiki.com/

If you want to see some **funny things** which are approaching the point of being **weird,** see this website: **http://www.eglobe1.com**

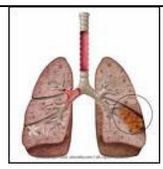
Instead of visiting the websites, bring the websites to you! .

If you find that you can not keep up with all your favorite journals, you can pull the content of all your journals on one page through RSS (Really Simple Summary). You can use web based readers like http://my.yahoo.com/ or www.google.com/reader**. You can also check out RSS directory for medics – www.rss4medics.com**

(3, Cont.)

BMC Infect Dis. 2007; 7: 10.

Diagnostic and prognostic accuracy of clinical and laboratory parameters in community-acquired pneumonia



- In this study, 545 patients with suspected lower respiratory tract infection, admitted to the emergency department of a university hospital were included in a pre-planned post-hoc analysis of two controlled intervention trials.
- Baseline assessment included history, clinical examination, radiography and measurements of procalcitonin (PCT), highly sensitive C-reactive protein (hsCRP) and leukocyte count.
- Of the 545 patients, 373 had CAP, 132 other respiratory tract infections, and 40 other final diagnoses.
- The AUC (Area under receiver operator characteristic curve) of a clinical model including standard clinical signs and symptoms (i.e. fever, cough, sputum production, abnormal chest auscultation and dyspnea) to diagnose CAP was 0.79 [95% CI, 0.75–0.83].
- This AUC was significantly improved by including PCT and hsCRP (0.92 [0.89–0.94]; $p < 0.001$). PCT had a higher diagnostic accuracy (AUC, 0.88 [0.84–0.93]) in differentiating CAP from other diagnoses, as compared to hsCRP (AUC, 0.76 [0.69–0.83]; $p < 0.001$) and total leukocyte count (AUC, 0.69 [0.62–0.77]; $p < 0.001$).
- To predict bacteremia, PCT had a higher AUC (0.85 [0.80–0.91]) as compared to hsCRP ($p = 0.01$), leukocyte count ($p = 0.002$) and elevated body temperature ($p < 0.001$). PCT, in contrast to hsCRP and leukocyte count, increased with increasing severity of CAP, as assessed by the pneumonia severity index ($p < 0.001$).
- PCT, and to a lesser degree hsCRP, improve the accuracy of currently recommended approaches for the diagnosis of CAP, thereby complementing clinical signs and symptoms. PCT is useful in the severity assessment of CAP.

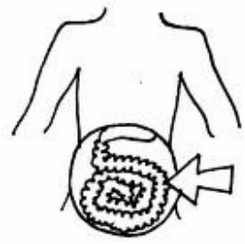
Humor corner: The Miracle Doctor

A new miracle doctor was in town. He could cure anything and anybody, and everyone was amazed with what he can do except for Banta, the town's grouch. So Banta went to this 'Miracle Doctor' to prove that he wasn't so miraculous. He goes and tells the doctor, "Hey, doc, I have lost my sense of taste. I can't taste anything, so what are you going to do?" The doctor scratches his head and mumbles to himself a little, then tell Banta, "What you need is jar number 43." "Jar number 43?", Banta wonders. So the doctor leaves and after five minutes brings a jar and tells Banta to taste it. He tastes it and immediately spits it out, "This is Shit!" he yells. "I just restored your sense of taste Banta," says the doctor. So Banta goes home very mad. One month later, Banta goes back to the doctor along with a new problem, "Doc," he starts, "I can't remember!" Thinking he got the doctor, the doctor scratches his head and mumbles to himself a little. Then tells Banta, "What you need is jar number 43..." Before the doctor finished his sentence, Banta fled the office.

From www.santabanta.com

(4, Cont.)

Arch Dis Child. 2001 Apr;84(4):328-31
Faecal candida and diarrhoea.



- Candida species are frequently isolated from stools of children with diarrhoea but are not proven enteropathogens.
- It is hypothesised that faecal candida causes diarrhoea.
- To determine the prevalence of faecal candida in childhood diarrhoea and the relation between faecal yeasts and diarrhoea.
- Comparison of clinical and laboratory data, including quantitative stool culture for yeasts from 107 children hospitalised with diarrhoea and 67 age matched controls without diarrhoea.
- Yeast species, predominantly candida, were identified in the stools of 43 children (39%) with diarrhoea and 26 (36%) without diarrhoea.
- The concentration of candida was positively associated with recent antibiotic use ($p = 0.03$) and with the presence of another enteric pathogen ($p < 0.005$), but not with patient age, nutritional status, or duration of diarrhoea.
- Candida species do not cause childhood diarrhoea in well nourished children.

Parting Thought…

It's a funny thing about life; if you refuse to accept anything but the best, you very often get it.

~ W. Somerset Maugham,
An English playwright, novelist, and short story writer.

(End, 5)