

Hello Doctor,

I was browsing the net when I came across these articles. I thought these might interest you, so I am sending the printout.

Thanks.

~Sachin

Plasmodium vivax Malaria

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We report 11 cases of severe *Plasmodium vivax* malaria in Bikaner (western India). Patients exhibited cerebral malaria, renal failure, circulatory collapse, severe anemia, hemoglobinuria, abnormal bleeding, acute respiratory distress syndrome, and jaundice. Peripheral blood microscopy, parasite antigen-based assays, and parasite 18S rRNA gene-based polymerase chain reaction showed the presence of *P. vivax* and absence of *P. falciparum*.

(Source:

<http://www.cdc.gov/ncidod/EID/vol11no01/04-0519.htm>

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Move Over, Cholesterol - High CRP Just as Bad for the Heart

Doctors are now training their focus on a major new risk factor for heart disease: CRP, or C-reactive protein. Researchers at [Brigham and Women's Hospital](#) (BWH) have found that statins -- a class of drugs known to lower cholesterol -- also can lower CRP levels. And keeping CRP at the proper level is just as important as controlling cholesterol for heart health, study data show.

Details of the research and its implications for "dual target" therapy are published in the January 6, 2005, issue of the [New England Journal of Medicine](#)

Paradigm Shift

The two studies together provide a strong message that it is necessary to reduce both cholesterol and CRP to achieve maximal patient benefits. "The emerging CRP data represents a paradigm shift that has the potential to save thousands of lives," Dr. Braunwald noted. "Our challenge now is to educate physicians and patients about the importance of CRP measurement and reduction, just as we did with LDL measurement and reduction a decade ago," he emphasized.

"We are on the threshold of viewing CRP not only as a marker for risk, but as a target for therapy," Dr. Ridker added. "The message for patients is to reach for the 'dual targets' of a low cholesterol and a low CRP."

(Source: <http://health.dailynewscentral.net>)

Diagnosis of pulmonary tuberculosis

'In children with suspected pulmonary tuberculosis, sputum induction, not gastric lavage, should be the standard technique for microbiological diagnosis'

Two studies in this week's *Lancet* investigate techniques for the diagnosis of tuberculosis. [Heather Zar and colleagues](#) compared gastric lavage with induced sputum, which has not been regarded as feasible in children. From 250 South African children aged between 1 month and 5 years, yield was better from sputum induction than from gastric lavage, in both HIV-infected and HIV-uninfected children. Meanwhile, [Daniel Vargas and others](#) compared a simple string test--already used to obtain samples in other infections--with sputum induction in 212 adults with HIV in Peru. This test detected more cases of tuberculosis than did induced sputum. These preliminary findings suggest that the string test is safe, well tolerated, and at least as sensitive as sputum induction, and warrants further assessment in children. In a Comment paper, [Alwyn Mwinga](#) discusses the strengths and limitations of these and other techniques for the diagnosis of tuberculosis, and emphasises the need for a simple, rapid, non-invasive test for children.

(Source: The Lancet, Volume 365, Number 9454
08 January 2005)

Evidence-Based Medicine
Recognizing and Managing Clinical
Uncertainty

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Clinicians deal with unavoidable uncertainty, arising from a number of sources, every time they make decisions about diagnosis, therapy, or prognosis.^[1-10] Laboratory medicine plays a central role in managing this day-to-day uncertainty. Laboratory tests and imaging studies help the clinician determine the cause and severity of illness, predict its clinical course, and evaluate the patient's response to therapy. Like all other aspects of medicine, however, laboratory tests also retain intrinsic elements of uncertainty. Laboratory tests are prone to systematic and random error, both in the conduct of the test and the analysis of the results.^[5,6,10,11]

Evidence-based medicine (EBM) is a way to quantify, and therefore manage, medical uncertainty.^[10] Evidence-based medicine both demands an unflinching confrontation of clinical uncertainty and provides systematic procedures for dealing with it.^[1,10] Consequently, EBM requires clinicians to question their reliance on noncontrolled observations and experience and even experts' opinions, and rejects practice standards based on dogma or unquestioned intuition.^[1-5,8,12,13] It requires practitioners to be aware of how susceptible any source of information is to random and systematic error ([Table 1](#)).

Evidence-Based Medicine

[Lab Med 35(12):724-731, 2004. © 2004 American Society for Clinical Pathology]

Table 1. Sources of Information Available to Clinicians and Their Value in Aiding Medical Decision Making

Source	Strength	Weakness
Clinical experience ^[1,3]	Necessary for developing competence in taking history and conducting clinical examination, source of insight into practical effects of diagnostic and treatment decisions; integrates observations based on relevant local populations; can provide valuable observations in rare cases	Susceptible to bias in recall and interpretation; no randomization or control of confounding variables is possible
Data from observational studies ^[11,13]	More easily and inexpensively performed than randomized clinical trials; when treatment effects are large, can be more clear than RCTs; good at identifying harmful effects	May under- or overestimate treatment effects in an unpredictable fashion
Data from randomized clinical trials (RCTs) ^[4,13,43]	Controls for bias; quantifies chance so it can be systemically managed	Difficult to apply to individual patient; data can be counterintuitive and hard to understand; little/no such evidence exists for many clinical problems
Expert authority/judgment ^[1,13,26,44]	Invaluable in judging research quality and application of evidence to individual patient	Prone to error, susceptible to recall and/or selection bias; often far more persuasive than scientific evidence
Formal training ^[1]	Provides broad, systematic overview that is crucial to enabling the clinician to consider patient-specific information (narratives,	Increasingly obsolete and often erroneous; does not necessarily account for advances in knowledge and changes in theory,

	physical exam, lab results) as part of an interactive system	may not be problem-based or consider patient-valued outcomes
Laboratory tests	Can provide reproducible and accurate data; can be validated with randomized controlled trials that produce statistical evidence of trending, permit review of outcomes	Definition of "normal" results is debatable; subjective endpoints may require inter-rater agreement to ensure validity
Local practice standards	Clinicians very likely to conform	Almost never subjected to scientific tests of their efficacy, susceptible to error
N of 1 trials ^{*[13]}	Tests effect on the specific patient being treated, obviates problems of interpatient variability; permits therapy to be calibrated to specific patient with great certainty	Unethical or methodologically impossible for many conditions
Narratives produced by patient or clinician ^[45]	Allows insight into patient's individual experience of condition and its management; allows insight into patient's individual preferences, values, and life circumstances	Susceptible to selection and/or recall bias, may omit information crucial to accurate diagnosis or effective evaluation of treatment
Trials performed by commercial entities (drug companies, manufacturers of diagnostic tests, etc)	Well financed; likely to be applied; responsive to market forces	May be biased in favor of "positive" results; may have failed to disclose results that do not favor the test or drug if performed prior to adoption of the pharmaceutical trials registry

* N of 1 trials include only 1 subject: the patient; they expose the patient to both a treatment and a placebo at random alternating intervals, with both patient and clinician blinded to which substance the patient is receiving.

Evidence-based medicine calls for the practitioner to thoroughly search the peer-reviewed literature that reports scientific studies, critically evaluate these reports for their validity and importance, and convert the data they report into probabilities that can help clinicians and patients reduce the uncertainty that surrounds decisions about diagnosis, treatment, and prognosis

(Source and other details available at : Lab Med 35(12):724-731, 2004. © 2004 American Society for Clinical Pathology)

Here is some thing light in the end ..

A List of Things You Don't Want to Hear During Surgery:

Oops!

Has anyone seen my watch?

Come back with that! Bad Dog!

Wait a minute, if this is his spleen, then what's that?

Hand me that...uh...that uh.....thingy

What do you mean he wasn't in for a sex change!

Damn, there go the lights again...

Everybody stand back! I lost my contact lens!

Well folks, this will be an experiment for all of us.

What do you mean, he's not insured?

Let's hurry, I don't want to miss "Bay Watch"

What do you mean "You want a divorce"!

FIRE! FIRE! Everyone get out!

