

normal Indian population). The platelet count is fortunately nowadays always included in histogram.

2. Fasting blood sugar to pick up diabetes (if abnormal, PPBS could be asked for later on by family physicians)
3. SGPT blood test is enough to pick up acute, or acute on chronic liver damage. SGOT is not at all required to be done because all alcoholic patients are diagnosed by history taking.
4. Serum alkaline phosphatase is mainly done to pick up osteomalacia and biliary obstruction (which may be diagnosed by asking for GGt in case the alkaline phosphatase levels are high and not otherwise).
5. Creatinine to pickup CRF in healthy patients.
6. Total cholesterol levels to pick up a very high risk patients having blood levels greater than 300.

The following is an example of the 14 blood tests (SMA 12+2) being carried out by different labs in Mumbai and that is FBS, Blood urea and nitrogen (BUN), Serum Creatinine, Uric acid, Calcium, Phosphorus, Protein, Total (alb., glob.) Cholesterol, SGPT, SGOT, Alkaline Phosphatase, Bilirubin, LDH

and CPK. The charges for this vary from Rs.1000/- to Rs.2500/-. As against this some labs include sodium, potassium, chlorides and bicarbonates as 4 tests out of the total 12-14 tests.

I do agree that in these big labs, where the blood tests are being done in auto-analyzers, since it costs them nothing more to run 14 tests instead of 6 tests, they will be losing the money of 8 tests.

But introduction of my suggested SMA 6 blood tests will be one step by which the labs will be offering help to poor and middle class patients in community practice, where the patient is looking forward to a blood test with a health checkup concept.

The cost of the SMA 6 should not be more than Rs.400/- to Rs.500/-, which will be affordable by most of the patients. It should be stressed to the family physicians that other tests like SMA 12+2, lipid profile, renal profile, liver profile, cancer profile, etc. should be asked only by specialists in hospital practice or in affording patients (often bill paid by the company).

In other patients specially of higher middle class the 2 blood tests which can be added and which are very useful to community practice are TSH and HBsAg. In elderly patients PSA would be a useful addition.

PROMISING TREATMENT TO PROMOTE ALCOHOL ABSTINENCE

'We have shown that a pharmacological agent can promote alcohol abstinence and prevent alcohol relapse in individuals with alcoholic liver disease'

Giovanni Addolorato and colleagues studied the effectiveness and safety of baclofen, a γ aminobutyric acid B-receptor agonist, in achieving and maintaining alcohol abstinence. 84 alcohol-dependent patients with liver cirrhosis were allocated either oral baclofen or placebo for 12 weeks.

Lancet Infect Dis 2007; 7 : 1884, 1915.

practice, if one has to exclude "acute" liver disease (the commonest being viral or drug hepatitis), only SGPT, bilirubin and alkaline phosphatase are more than enough. One can exclude serum alkaline phosphatase from this list. Even serum bilirubin can be excluded and could be replaced by presence of bile pigments in the urine (a cheaper test) in a patient where SGPT is very high.

Coming to chronic liver disease, really speaking there is not a single liver function test which helps in the diagnosis of chronic liver disease like cirrhosis of liver, which is unfortunately a silent disease, and is better spotted by routine USG of liver, spleen and Doppler studies to pick up collateral vessels.

In my opinion only a raised SGPT as an incidental finding calls for further investigation of liver profile.

The cardiac profile for a health check up includes total cholesterol, HDL cholesterol, LDL cholesterol, VLDL cholesterol, triglycerides, lipoproteins A and B, lipoprotein (a), homocysteine and a few more. In community practice a total cholesterol reading is enough to warn the patient that the lipid profile is abnormal. Rest of the tests are more useful if done free (or paid by the company).

Many labs add CPK and LDH to make the number of tests to 14. These tests are of no use in diagnosing common illnesses (although LDH may be raised in malaria or megaloblastic anaemia, which is uncommon). Very often LDH is raised because the technician shakes the bulb in which blood is collected, which can cause haemolysis.

A routine cancer profile includes LDH, uric acid and tumour markers but certainly is not a blood test for a community health check up.

Raised CPK is commonly seen nowadays in patients who go to the gym in the morning

or do heavy exercise. CPK is a very useful test for diagnosing myocardial infarction or muscle disease (rarely leptospirosis).

Should calcium test be done to diagnose osteomalacia, which is highly prevalent in our community? Unfortunately in my experience more than 90% of patients of osteomalacia have normal serum calcium and are diagnosed on the basis of raised serum alkaline phosphatase (bone fraction or with normal GGt). Only a few of them need an estimation of Vitamin D and PTH levels. The combination of calcium and phosphorus in routine health checkup is not at all called for and is useful only in a renal profile.

And finally the blood test of uric acid can be omitted safely in community practice. Gout is often over diagnosed and misdiagnosed because the levels of uric acid do not help in diagnosis, which is a clinical diagnosis. The test is more useful in a hospital-based atmosphere and in patients with haematological diseases or those attending oncology clinics, since they have very often high levels of uric acid, which cause renal damage.

Thus, I have a suggestion for all the five star pathological laboratories in India. Instead of making money and more money, in addition to expanding globally, they should also think of doing some work for poor patients, which all the doctors in other specialities do in their day to day practice. Offering a little discount only encourages the rich patients to spend more money. Instead a small package of 6 blood tests could be offered openly to all family physicians, whose health conscious patients are interested in their blood profile, where some silent illnesses are picked up by doing these blood tests.

My suggestions for SMA 6 are as follows:

1. Include a CBC (mild anaemia is the commonest missed diagnosis in so called

Cost Effectiveness/Yield/Medical Economics

**Reduce SMA 12 Blood Test to SMA 6 at Half the Price -
A Call to 5 Star Pathological Laboratories**

OP Kapoor

In the last few years pneumonias are classified as community acquired pneumonia or pneumonia acquired in hospital.

A family physician need not have any knowledge about hospital acquired pneumonia, which is otherwise difficult to treat and call for frequent culture and drug sensitivity tests, as well as parenteral antibiotics. The cost of all this is very high but has to be borne by hospitalized patients, who are very ill. A family physician can treat community-acquired pneumonia by only administering one capsule of antibiotic two to three times a day for a few days. The cost of the treatment is very less and does not involve culture and drug sensitivity tests or costly parenteral antibiotics.

Then why not to follow the same policy in blood testing in auto-analysers? For example any SMA 12 or SMA 14 blood test includes 12-14 blood tests. These were originally intended for the hospitalised patients. Years back, when these blood tests were offered, the cost was only Rs.100/-. Today the cost of these tests is Rs.1000/- to Rs.2500/-. The poor and middle class patients in a community practice can certainly not afford this type of test, where under the circumstances the information given is very little. Let us analyse what blood tests are offered to the patients

Ex. Hon. Physician, Jaslok Hospital and Bombay Hospital, Mumbai, Ex. Hon. Prof. of Medicine, Grant Medical College and JJ Hospital, Mumbai 400 008.

in different labs. For example, the 12 blood tests could be :

1. Fasting blood sugar
2. Blood urea
3. Creatinine
4. Serum Calcium
5. S. Phosphorus
6. SGOT
7. SGPT
8. Alkaline phosphatase
9. Uric acid
10. Sodium
11. Potassium
12. Bicarbonates and
13. Chlorides

CPK, LDH, Total Proteins, Albumin and Globulin are additional tests, some of which are included in the above list.

I do agree that a renal profile should include blood urea (or urea nitrogen), creatinine, sodium, potassium, Bicarbonates, chlorides, calcium and phosphorus. But in private practice, which is community based, for a routine health checkup, a reading of only creatinine is enough to warn the doctor to exclude chronic renal failure, which is a silent disease. All other tests, in that situation are redundant.

Liver profile, consists of total protein, albumin, globulin ratio, SGOT, SGPT total bilirubin (direct reacting and indirect, reacting bilirubin) alkaline phosphatase, Prothrombin time etc. In Community