

Haematuria in Renal Cancer is Like Increased PSA in Prostatic Cancer

OP Kapoor

While searching for cancer in an old man especially whose ESR is raised, blood tumour markers would help to identify liver, pancreatic and small intestinal cancer.

Raised PSA above 10 points towards prostatic cancer.

Coming to renal cancer off and on I see

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

this being missed while doing sonography. I would like to stress that repeated urinary examination for haematuria is one of the most important investigation and if present calls for imaging like CT scan. Unfortunately, while investigating the patient practitioners only ask for blood tests and do not ask for routine urine examination.

Hepatitis C: only a step away from elimination?

Acute HCV infections are usually asymptomatic. However, about 75% of patients develop chronic infection, which can lead to liver cirrhosis and hepatocellular carcinoma.

A series of new drugs more effective in viral clearance with fewer side-effects are changing the landscape for hepatitis C.

As described in Paul Webster and colleagues comprehensive Seminar, until recently interferon in combination with ribavirin was the main treatment for hepatitis C, but eligibility, safety, tolerability, and effectiveness were limited.

The C-WORTHY trial assessed a single-tablet once-daily regimen of grazoprevir (protease inhibitor) are elbasivir (NS5A inhibitor) with or without ribavirin for patients with HCV genotype 1.

In the PHOTON-2 trial, Jean-Molina and colleagues specifically assessed the recently approved regimen sofosbuvir (NS5B inhibitor) plus ribavirin in patients infected with HCV genotypes 1-4 co-infected with HIV. They confirm the pan-genotypic potential of sofosbuvir (SVR 12 weeks 84-89%), offering HIV co-infected patients a useful interferon-free option. The fourth trial goes a step further and assesses whether the addition of a third direct-acting antiviral drug to an interferon-free, ribavirin-free combination (sofosbuvir and ledipasvir) would allow shorter treatment duration - an important factor for a patient population in which treatment compliance and adherence can be in issue.

An opportunity now exists to almost eliminate this infection from the UK, wrote Roger Williams and colleagues in the Lancet Commission on Addressing liver disease in the UK.

The Commission estimated that with these new antiviral drugs we could contemplate the eradication of infections from chronic hepatitis C virus in the UK by 2030.

Scaling-up treatment-in any country will face important cost issues.

The financial returns from reduced health-care costs and higher economic activity might easily outweigh the expense of the medicines themselves. This kind of broader cost-effectiveness work needs to be urgently completed.

The Lancet, 2015, Vol 385, 1045

Neuro Interventional Specialists

OP Kapoor

In my experience I found that many doctors have not registered in their mind that Neuro Interventional Doctors are much more capable and are doing more complicated procedures than Interventional Cardiologists.

Not only these doctors can do the same thrombolysis and put stent in the brain

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

vessels but they also put 'coils' in the aneurysms of the vessels of the brain which in the past used to be operated upon.

Today for most of these patients having aneurysms in the brain or A.V. Malformation - an Interventional Neurologist can do the needful without doing surgery. In the later embolisation is usually successful.

Trigeminal neuralgia

Trigeminal neuralgia is characterised by sharp stabbing pains that are usually unilateral, last for less than a minute, and occur within the distribution of the fifth cranial nerve

Few high quality, large randomised control trials are available to guide practice

Initial treatment is usually medical with a single first line agent (such as carbamazepine or oxcarbazepine)

Consider surgical treatment if an adequate trial of a single first line agent at maximum tolerable dose has failed.

Microvascular decompression : No RCTs exist but observational evidence suggests that pain relief after this procedure is usually immediate, and it is the operation of choice in patients whose pain is no longer controlled by drugs and whose quality of life has markedly deteriorated.

Stereotactic radiosurgery : This is performed using technologies such as the Gamma Knife, CyberKnife, and linear accelerators with multileaf collimator capabilities (LINCA-MLC). It **does not** require general anaesthesia (or sedation), but its pain relieving effects are not immediate.

Adverse effects include facial numbness, although this is less common than with other palliative destructive procedures.

Percutaneous destructive neurosurgical techniques (radiofrequency thermocoagulation, glycerol rhizolysis, or balloon compression): Similar to microvascular decompression, but unlike stereotactic radiosurgery, these techniques can achieve immediate pain relief and can therefore be considered for emergency management. However the duration of response is shorter than seen with microvascular decompression, and a brief pulse of heavy sedation and sometimes general anaesthesia is needed. Adverse effects include a small risk of facial numbness, corneal insensitivity, and deafferentation pain, particularly with repeat procedures.

Joanna M Zakrzewska, Mark E Linskey, BMJ, 2015, Vol 350, 33-34

Cost Effectiveness / Yield / Medical Economics Value of Six Minutes Walk Test

OP Kapoor

Six minutes walk test is one of the simplest test which can be done by general practitioners and requires only pulse oxymeter. The fall of more than 4% in SPO₂ is abnormal. It is a very good test to follow the progress and response to the

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

treatment in patient of Interstitial Lung Disease (ILD) but the cost of test is nothing.

What I would like to stress is if the patient comes with dyspnoea on exertion and you find no cause and X-ray Chest is normal, this test if positive calls for doing HR CT scan to diagnose I.L.D.

It is a stroke?

Stroke is increasingly common and often fatal or disabling. The absence of a definitive diagnostic test for stroke and the potential for emergency interventions to restore brain perfusion, improve survival free of handicap and minimise early recurrent stroke mean that doctors need to be able to diagnose acute stroke rapidly and accurately.

What is a stroke?

Traditionally, stroke has been defined clinically by the abrupt onset of symptoms of focal neurological dysfunction that last more than 24 hours (or lead to earlier death) and are caused by acute vascular injury to part of the brain.

Suspect the diagnosis of stroke in all patients with abrupt onset of neurological symptoms, particularly in those with risk factors for stroke. Early and acute diagnosis of stroke enables early interventions targeted to the cause, which may improve survival and functional recovery and minimise early recurrent stroke.

Some stroke patients will present with atypical stroke symptoms in which the symptoms onset is not sudden or the loss of neurological function is not clearly anatomically-localising.

The FAST (Facial drooping, Arm weakness, Speech difficulties and Test (or Time)) score is a useful screening test in the community, while emergency department doctors may use the FAST or ROSIER scales, and stroke physicians will undertake a more complete and systematic neurovascular assessment.

Stroke lacks a perfect diagnostic test, and current diagnosis relies on clinical history and examination, supported by brain imaging (such as computed tomography and magnetic resonance imaging, which can be normal).

Seizures, syncope, and sepsis account for 20-25% of suspected strokes.

Graeme J Hankey, David Blacker, BMJ, 2015, Vol 350, 32

ESR Increased and CRP Normal

OP Kapoor

Usually, inflammatory markers which asked for are - ESR (Erythrocyte Sedimentation Rate) and CRP (C-Reactive Protein). Very often both are raised in many infections. ESR is a cheap test while CRP is a costly test. A patient having multiple complaints and normal ESR and Ex. Hon. Physician, Jaslok Hospital and Bombay Hospital, Mumbai, Ex. Hon. Prof. of Medicine, Grant Medical College and JJ Hospital, Mumbai - 400 008.

CRP should remind you of functional disease.

However, there are certain diseases where ESR is increased but CRP is normal. These are:-

1. S.L.E. (systemic lupus erythematosus)
2. Sjogrens syndrome
3. Scleroderma
4. RSD (reflex sympathetic dystrophy)

Lowering LDL Cholesterol is Good, but How and in Whom?

The benefits of lifelong lowering of LDL cholesterol level were substantial; a 47 to 88% lower risk of coronary heart disease was observed over a period of 15 years in middle-aged persons with such genetic polymorphisms.

Two reports now published in the Journal describe the results of long-term studies of treatment with monoclonal antibodies to PCSK9 to lower LDL cholesterol levels. One trial, entitled Long-Term Safety and Tolerability of Alirocumab in High Cardiovascular Risk Patients with Hypercholesterolaemia Not Adequately Controlled with Their Lipid Modifying Therapy (ODYSSEY LONG TERM), was a double-blind, randomised, controlled trial of alirocumab (150 mg administered subcutaneously every 2 weeks) versus placebo for 78 weeks in 2341 patients at high risk for cardiovascular events who were already receiving the maximum tolerated doses of statins. Two other trials, entitled Open-Label Study of Long-Term Evaluation against LDL Cholesterol 1 (OSLER-1) and OSLER-2, used a randomised, open label design in a total 4465 patients with various degrees of cardiovascular risk.

As with statins, levels of apolipoprotein B, non-high-density lipoprotein (HDL) cholesterol, and triglycerides were lowered by treatment.

Both studies showed no excess of adverse effects overall or in those who had an LDL cholesterol level of less than 25 mg per deciliter (0.6 mmol per liter), but the follow-up period was relatively short.

What's new?

Two trials of niacin revealed lower levels of LDL cholesterol and lipoprotein(a) when niacin was added to statin therapy but no net clinical benefit and very worrisome signals of harm.

And the recent long-awaited presentation of results of a trial in which ezetimibe was added to moderate-intensity statin therapy in high-risk patients showed only modest benefit, though with excellent safety.

Neil J. Stone, Donald M. Lloyd-Jones, N Engl J Med, 2015, Vol 372, 16:1564-1565

Symptoms and Signs/Obsolete/Evergreen/New Non Pulmonary Cough

OP Kapoor

The moment patient comes with symptoms of cough most of the practitioners will think of a cause to be in lungs, especially if it is a severe cough or a loud barking cough. I want to point out that there are many causes of this cough which are not in the lungs but in the upper respiratory passages. The following are the non-pulmonary areas which can produce severe cough:-

1. **Pharyngitis** : it is worth remembering that an attack of tonsillitis should not produce cough unless the tonsils are swollen and has got exudates due to virus infection like cytomegalic virus. Viral pharyngitis is extremely

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

common.

2. **Tracheitis** : this produces severe cough and in addition there is discomfort and tenderness over the trachea. Most of the drugs do not work and steam inhalation and passage of time would work.
3. **Epiglottitis** : this condition can cause very severe cough although it may be associated with pharyngitis.
4. **Laryngitis** : produces cough and hoarseness of the voice.
5. **Vocal cord dysfunction** : in this condition in addition to cough there are spells of breathing problem and slight hoarseness of the voice.

Finally, I would like to state that all the above coughs can last upto 4-8 weeks.

Cardiovascular Imaging and Outcomes - PROMISEs to Keep

In this trial, 10,003 symptomatic patients with suspected coronary artery disease were randomly assigned to either anatomical testing with the use of coronary computed tomographic angiography (CTA) or to functional stress testing with the use of exercise electrocardiography, stress echocardiography, or nuclear stress testing.

Event rates were low and similar in the two groups: 3.3% in the CTA group and 3.0% in the functional-testing group. So, no winner was declared. This result prompts the question: How will a tie for CTA change clinical practice?

A number of single-centre and multicentre studies have shown that CTA has high sensitivity, and an extremely high negative predictive value.

However, many insurers other than Medicare have balked at covering CTA, in part out of concern about clinicians using it to screen for coronary artery disease in asymptomatic patients, for which it is not indicated.

As CTA technology advances, radiations doses continue to decrease, without a decrement in diagnostic accuracy.

Christopher M. Kramer, N Engl J Med, 2015, Vol 372, 14:1366-1367

Disease Pattern In India

Positive Urine Culture in a Male Patient - Do Not Miss Phimosis

OP Kapoor

I often see Hindu patients specially coming from States where people are less educated, who show me reports of positive urine culture being treated and relapsing. The doctor has not spent time on retracting prepuce and looking for phimosis.

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

Urine infection in absence of any organic disease of the genito urinary tract is so uncommon that most likely you are missing phimosis. Always advise circumcision in such patients. The mothers should be educated in the Hindu families that whenever a son is born they should retract the prepuce while giving bath and teach the same to the boy as he grows old.

Shorter treatments for hepatitis C: another step forward?

A response to therapy (undetectable viraemia 12 weeks after treatment ends) reduces disease progression, but therapy has long involved unpalatable interferon and ribavirin regimens given for 6 months, with extended durations for some genotypes (eg, genotype 1).

However, new oral drug combinations that have higher than 90% response rates and few side-effects have encouraged patients and their doctors to reconsider therapy. For patients with genotype 1 HCV infection, two strategies have emerged - one involves combinations of at least three potent, low-resistance-barrier drugs (a protease, an NS5A inhibitor, and a non-nucleoside inhibitor) and the other uses the high-resistance-barrier nucleotide sofosbuvir, with either an NS5A inhibitor (such as ledipasvir) or a protease inhibitor (simeprevir). For the triple, non-nucleotide regimen, therapy for 12 weeks is needed, but for sofosbuvir and ledipasvir 8 weeks is sufficient for patients without cirrhosis, although 6 weeks of therapy is less effective. Ribavirin is a weak antiviral drug that might improve response rates but adds side-effects; researchers increasingly avoid it.

Kohli and colleagues show that HCV clearance with 6 weeks of treatment is possible and, with high response rates seen when sofosbuvir and ledipasvir were combined with either a non-nucleotide or a protease inhibitor, the nature of the third drug seems to be unimportant.

Treatment for HCV has quickly moved from poorly tolerated interferon-based therapies to extraordinarily effective, side-effect-free drug combinations that cure almost all compliant patients.

Current data comparing 12 weeks and 24 weeks of treatment suggest that patients with cirrhosis might be poor candidates for short duration therapies.

Despite the progress that has been made, early identification and treatment of patients before they have developed cirrhosis must remain the priority.

Graham R Foster, *The Lancet*, 2015, Vol 385, 1054-1055