

SCREENING

Screening is the process of searching a population for an illness. For screening to be worthwhile, there must be a significant chance of the illness occurring in the first place, the test must be reliable and the illness must be treatable. For example, screening for rabies in Australia would be ridiculous as it is virtually non-existent in this country and anyone unfortunate enough to have the disease has little or no chance of survival. In addition, tests have some inherent potential for error. If the false positive rate for a rabies test was only 1 in 1000 and the entire population of Australia were screened, there would be 20,000 false positive results. Imagine the fear in a stadium full of people who all tested positive for rabies and the cost and risks involved in performing a brain biopsy on every one of those people. If a brain biopsy resulted in the deaths of only one in 1000 of those people, 20 people would die for absolutely no gain. This is of course a ridiculous scenario, but illustrates the dangers of 'just doing a test'.

At present, screening programs which have proven to be effective exist for breast and bowel cancer and in practice screening for prostate cancer is performed routinely even though proof of the benefits of this is not yet available. In future, an effective screening program for cancers such as ovarian cancer may become available but the results have as yet been disappointing. This is not to say that being suspicious of and even considering screening for ovarian cancer is not advisable but there certainly is no blanket recommendation as yet. In the case of ovarian cancer, the cancer is frequently advanced and detected when it is 'un-treatable'. It is however a relatively uncommon cause of death and tests such as ultrasound and blood tests give vague, unreliable results meaning 'positive' results are often false and lead to potentially dangerous invasive tests and 'negative' results give a false sense of security. A potentially promising US screening program had to be abandoned after deaths from complications outnumbered lives saved.

Just as futures trading is unwise for all but a handful of investors, attempting to screen for illnesses without the benefit of evidence of safety and efficacy is generally not recommended. There are some circumstances where it may be reasonable to do this, after all, the first women whose lives were saved by mammography prior to the benefits being proven were no doubt very glad they took the risk. The key point is that doing something unproven does carry risk – it is not 'just a test', as the families of some healthy patients who died after complications of a test could tell you.

At present, technology such as MRI exists which could potentially screen for devastating cancers such as brain and pancreatic tumours. It is definitely not our policy to promote the widespread use of such tests but it is not our policy to try to hide their existence from the general public. If you have any questions about such unproven tests, it is better to ask than be misled by unreliable sources such as the internet. One of the keys to making a decision to perform such a test is to have a very clear plan for what to do in the event of an abnormal result. The tendency to favour immediate invasive testing rather than ongoing non-invasive testing is dangerous but

tempting. Ask yourself how long you could be trusted to avoid such a temptation before even considering embarking upon less invasive testing.

The following is a list of tests that might be considered as part of a thorough workup. Those in bold type have been proven to be of benefit and should not be missed by certain groups of patients, those in italics we consider safe in themselves but still with potential to yield misleading results and to result in more invasive or dangerous tests or procedures. Those tests marked with an asterisk are tests that carry inherent risk and/or have as-yet unproven value as screening tests yet we would consider undergoing them ourselves based on our knowledge of the risks and benefits. Remember, bone mineral density and CT scans expose the patient to radiation which carries a small risk of death as a direct result of the procedure. If you would be willing to buy a lottery ticket based on the logic that “someone’s gotta win it”, bear in mind that the same goes for bad luck as well. Similarly, colonoscopies are undoubtedly superior to stool testing for the purposes of bowel cancer screening but it is possible to die as a direct result of the procedure or the associated anaesthetic. Finally, please note that medical tests are costly to perform and the less evidence there is that screening tests will be of proven benefit, the more likely it is that you will have to cover the entire cost as Medicare, rightly, will not spend money on unproven tests that could be better spent in other areas of health care.

- **‘routine’ blood tests, such as cholesterol and blood sugar testing**
- **pap smear**
- **mammogram**
- **fecal occult blood testing (stool screening for bowel cancer)**
- **optometrist review including ocular pressure testing**

- *prostate specific antigen blood testing + rectal examination of prostate*
- *ward test of urine (urine dipstick)*

- colonoscopy*
- ovarian ultrasound scan*
- bone mineral density*
- exercise stress ECG* or radionucleotide myocardial perfusion scanning*
- coronary artery calcium scoring (by CT scan)*
- upper abdominal MRI*