What is “A Biopsy”?

OP Kapoor

Most laymen are afraid of biopsy. Years back when I wrote a monograph on Arab patients,¹ I wrote that although Arabs are uneducated, most of the patients were conversant with the word “Biopsy” (called as Aayeena in Arabic) and would positively ask for this test, if it is required

Indian population is very scared about this “investigation”. The G.Ps should motivate their patients to get this procedure done. In making a diagnosis, the “Imaging procedures” of all types of scanning, usually locate a “lesion” but on occasions can not diagnose it accurately.

Here comes the value of “biopsy”. Some time back, I wrote about the surgeons updating their knowledge about ‘biopsies”. Biopsies are done not only for histopathology as well as cultures and molecular aetiology, which may be more useful in the diagnosis. Of course, all biopsies can be false positive or false negative. Now that we have better specialized histopathologists (for hepatology, pulmonology, oncology, better culture facilities using radioimmunoassay and better molecular medicine for PCR etc) I can see that in future patients who can afford expensive treatment, will get a better and accurate diagnosis.

What are the types of biopsies, which we could motivate our patients to go for?

1. FNAC (Fine Needle Aspiration Cytology) where only a needle is inserted and the aspirate is sent to a good “cyto”pathologist in addition to culture etc. This is the best biopsy for nervous patients, who agree readily for it, because it is done under local anaesthesia as an outdoor procedure. Of course, quite often the reports are misleading because the tissue obtained is less.

2. FNAB (Fine needle aspiration biopsy) – Here the needle used is bigger and more tissue is obtained and the diagnosis is more accurate.

3. “Core” biopsies are done under ‘imaging’ guidance, either sonography or CT guided. These of course (though very costly) hit at the right spot, take the real required tissue and give a very accurate diagnosis. Those radiologists, who have become good interventional radiologists can reach almost any organ and give you a tissue!

4. Full tissue biopsy- where an operation is performed (laparoscopy or laparotomy or excision in the neck etc) and a big chunk of tissue is removed for biopsy. It is of course more accurate.

5. Finally, in marrow examination - a marrow puncture for a marrow smear is done for diagnosing types of anaemias, parasites, blood cancers etc. But for the latter, always ask for “Trephine” bone marrow biopsy which is a slightly painful procedure – but depending on how big a needle a haematologist uses - the better would be the diagnosis!

Reference