First, Clinical Examination then, and only then, Investigations

by

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A rural surgeon generally feels that he is grossly handicapped because he/she does not have access to investigation facilities. But he/she need not feel so. It is often said that clinical examination gives a correct diagnosis in majority of the cases. Even now, that aphorism is true.

Well known Lord Platt from University College of London, had said in 1949, *" if one were to listen to the patient long enough, the patient would give away the diagnosis.."* that is, a good history taking will lead one to the diagnosis. Nowadays, we have a plethora of diagnostic laboratories, equipment and gadgets to help us. One is tempted to use them all to improve one's diagnostic abilities.

Lord Platt's students, now teachers in different medical schools in UK, recently conducted a triple blind, computerized, prospective study and published the results in British Medical Journal.[1] The study showed that **80% of the accurate diagnosis and 100% of the future management strategies could be arrived at, at the end of listening to the patient and reading the referral letter.** That is, 80% even before the physical examination. This could be refined 4% more by physical examinations and only 8% by all the investigations including PET scan! That also means that 12% will remain undiagnosed despite everything. This is truly a very encouraging bit of information to every rural surgeon who, if he concentrates on his clinical acumen and skills, can be 84% correct . **It also means that all the urban colleagues are better by about 4% over rural surgeon's accuracy, with all the latest, expensive and state of art gadgets!**

I once made the mistake of relying on the investigative report wholly. A person I knew before came to me for appendicectomy, with sonographic diagnosis of Acute Appendicitis. With a diagnosis already made, I omitted going in to the clinical examination and details. I operated upon him. I was shocked to find a caecal malignancy. By extending the R.I.F. incision, I somehow managed to resect a fair length of ileum and major portion of the ascending colon. This was followed by chemo and radiation therapies and happily, he is alive now over 15

years after the surgery. But I learnt the unforgettable lesson; **clinical examination must come first every time**.

Ever since that time, it has become my practice to start afresh with 'history taking' and clinical examination not looking at the investigations done till then. I have been saved on many occasions. I am just giving below two examples where clinical diagnosis scored over gadgets.

Case 1.

A lady of about 35 years went to her G.P. with abdominal pain. He sent her for sonography of her abdomen which showed a solitary gall stone. Sonologist diagnosed in bold letters calculous cholecystitis. Her G.P. advised her to undergo cholecystectomy. She came to me because she wanted me to perform the surgery. As usual, I took a detailed history without looking at the investigations already performed, and did a clinical examination and concluded that she had acute/sub-acute appendicitis. She showed me the sonography report and said that she is advised to undergo cholecystectomy! I examined her again to see if I had missed anything. The gall bladder area was painless and she had positive symptoms and signs of appendicitis.

In such situations, the printed reports of a specialist carry more weight than oral/hand written opinion of a surgeon like me. It can be difficult to convince the patient against that stone staring at her in the sonograph and the specialist's printed opinion. Yet I explained to her where her appendix was and where gall bladder was and how she had tenderness over the appendix. I stressed that if I was to treat her, she had to agree to appendicectomy and not cholecystectomy. Happily, she readily agreed. We found acutely inflamed appendix.

Case 2.

A married lady, 32 years of age, nullipara but had had an abortion in the past, had gone to a physician for pain in left abdomen and weakness. He found some vague tenderness in L I F and anaemia (Hb 4.9 gm%) but nothing conclusive. He sent her for ultrasonographic examination of abdomen. Sonologist reported normal abdominal organs and ascites. Then she was referred to me.

I started from the beginning. The only thing that I could learn in addition to what the physician had written is that her last menstruation was scanty. Our teacher Dr. C. G. Saraiya, in Bombay had impressed upon us that **" in a woman in child bearing age, may she be a queen or a beggar on Bombay streets, think of pregnancy first…."** So, I looked at her with that possibility. The lady had lower

abdominal tenderness plus tender pelvic floor on vaginal examination favouring ruptured ectopic gestation as a high probability. Urine test for pregnancy confirmed pregnancy. In the past, I used to do the abdominal tap to look for blood. Here we repeated ultrasonography with a request to look more carefully at the fallopian tubes. Sonologist found that she had a ruptured right tubal gestation and haemoperitoneum which was wrongly diagnosed as ascites by earlier sonologist.

Laparotomy and right tubectomy was performed.

It does not mean that I am against investigations. We must be thankful that so many new and vital tests make so many complicated and rare diagnoses easy. They are needed all the time to either

1- to confirm the diagnosis,
2- to be doubly sure of the diagnosis when a major procedure like surgery is proposed and
3- to exclude other pathologies.

In a case of R.I.F. pain which does not fit in to any particular condition, ultrasonography may reveal a ureteric calculus, or an ovarian condition. And similarly other investigations too are very helpful in avoiding a wrong diagnosis. But the findings of investigations must be related to the clinical diagnosis. If they do not concur or contradict clinical findings, one must view them with caution.

The **management** of the treatment is an important decision too. Investigations reports never advise about management.

Broadly speaking, management involves

1. What investigations are needed, if at all
2. Can the patient be treated as an out-patient?
3. If he needs admission to the hospital,
   a- Would he be managed conservatively,
   b- Or surgically?
4. Does he need to be referred to another hospital?

All these decisions will have to be based primarily on clinical assessment alone, during the first examination of the patient. Most of the time, investigations will only support the clinical conclusions.

The investigations cost a lot more money than the consultation fee. If the patient cannot afford the additional expenses for the investigations or if they are not available in the area, rural surgeon still has to treat but, only on clinical decisions.

Unfortunately, most of the medical colleges lay a lot of stress on the modern investigations. The rural surgeon therefore has to start developing his clinical acumen by himself with his own clinical experience.

I believe that it is a boost to your self-confidence when you are able to diagnose a condition correctly, and a great satisfaction too in treating what you yourself have diagnosed correctly rather than treating someone else's diagnosis.

REFERENCE

1. Hampton JR, Harrison MJ, Mitchell JR, Prichard JS, Seymour C. Relative contributions of history-taking, physical examination, and laboratory investigation to diagnosis and management of medical outpatients. Br Med J. 1975 May 31; 2(5969):486-9.