Disease Pattern in India

The Importance of Routine CBC and ESR in Common Fevers

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In the past, I have discussed this subject. Although no advances have taken place in this particular field, as more data accumulate more facts are coming to light.

First of all in olden days, a manual CBC count did not include platelet count.

Secondly the differential count of cells like eosinophils is probably more accurate with automated machines, rather than manual, where depending on individual experience there is a marked difference in the eosinophil count.

Finally, nowadays more often ESR is asked along with CBC in investigation of common fevers which is a good habit. A very high ESR should remind one of HIV infection which otherwise he would never think of while managing a common fever. Though high ESR will make you look for Tuberculosis, what I would like to stress in this article is that it is very rare to find a high ESR in case of enteric group of fevers. Thus a normal ESR should support a diagnosis of typhoid. Vice versa in malaria, often it is elevated.

Coming to value of differential count in diagnosis of common fevers, in a case of typhoid fever the eosinophil count falls and there is eosinopenia. This simple observation can quite often rule out chances of typhoid. The platelet count is hardly ever found low in patients with enteric fever. Though a low platelet count should more or less exclude typhoid, low platelet count should favour the diagnosis of malaria or viral fevers, specially dengue.

Talking about low platelet count it is more common in falciparum malaria. Although in dengue fever, which is more or less a universal finding, off and on you will find that platelet count may fall in a dengue patient by the fifth or sixth day by which time the patient has more or less recovered. So, the clinical diagnosis of dengue with a very rapid onset of high fever, the severity of body ache, so much so that the rotating of the eyeballs even may be very painful for the patient and the other clinical features are more important in diagnosis than the low platelet count.

References
1. Kapoor OP. Similarly in the blood diagnostic tests between typhoid and dengue fever. BHJ 2007; 49 (3) : 499.
5. Kapoor OP. Four blood tests which are much superior to X-rays to diagnose bone conditions. BHJ April 1998; 40 (2) : 267.
7. Kapoor OP. Why is ESR more informative than ASO titre ANA levels and presence of rheumatoid factor in a patient who complaints of joint pains? April 2001; 43 (2) : 308.

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