

## **LOCAL PATHOLOGY AND SYSTEMIC DISEASE**

Sir Zachary Cope

*“Distension, rigidity, vomiting and pain, are abdominal actors which often deign to act on behalf of the chest, spine or brain”*

Quoted from his book (The diagnosis of the acute abdomen)

### **Thamer A Hamdan**

MB, ChB, FRCS, FICS, FACS, Professor of Orthopaedic Surgery, Chancellor of Basrah University, Basrah, IRAQ.



The wise physician is always fully aware of the fact that human body is one block of connected systems which are related to and helping each other. So, any pathology occurring in any part of this integrated system, may affect other parts in a direct or indirect way. A well known fact is the vague ill defined presentation of a disease to the extent that it might be unbelievable.

There are many reported cases of odd presentation. One of the good examples is a patient with acute glaucoma operated on as a case of acute abdomen due to sickle cell crisis.

A soft tissue nodule due to leukemic infiltration is another example.

What confuses the clinical situation is the solitary local presentation in one system of the body, where there is an underlying systemic disease or a hidden flame like malignancy. Malignancy in a certain organ may present with metastasis somewhere in the body before their local manifestation. Pyrexia of unknown origin may be due to a hidden renal cell carcinoma. Patient with gout or with a parathyroid adenoma may

present with a stone in the urinary tract. Pathological fracture is a good example of local pathology which is related to a systemic disease. A child with cerebral palsy may show squint and carious teeth with or even without spastic limbs or other manifestations of cerebral palsy. Following diarrhea, a patient may develop arthritis with or without joint effusion. Both acromegaly and psoriasis may present initially with arthropathy.

The skin may be the first site to show a hidden malignant lesion. A good example is Sister Joseph nodule which is related carcinoma of the stomach. Deep vein thrombosis in the calf may reflect malignancy like pancreatic tumor. Carcinomatous neuropathy or myopathy (non-metastatic manifestation of malignancy) may lead to a local pathology in the limb to start with. Multiple sclerosis may cause eye changes or urinary changes before neurological deficit. Painful shoulder and skin lesion may be the first presentation of diabetes mellitus. The hidden and forgotten joint (e.g. sacroiliac joint) is a site of many systemic pathologies like ankylosing spondylitis. Backache which is a very common complaint of millions of people may reflect a hidden malignancy, dissecting aneurysm of the aorta, retroverted uterus, chronic cervicitis or carcinoma of the pancreas.

From the examples discussed above, we can conclude that a comprehensive physical examination with clinical awareness and high index of suspicion will very much help in reducing the delay in reaching a diagnosis, and in avoiding prolonged morbidity or even mortality. This is because a delay in diagnosing malignant lesion may lead to dissemination which is beyond any sort of treatment. Laboratory investigations and imaging studies are required to achieve the definitive diagnosis.

Finally, a good physician is a good physical examiner with open mind and full awareness of all possibilities, and not the one who depends on investigations.

