

### Background:

Non traumatic Low back pain (LBP) is one of the commonest complain in emergency department. The most of non-traumatic LBP cases are easy to treatment and management but sometime is sign for a killer disease. Common is common but rare is found. In our practice we deal many cases of non-traumatic LBP. The simple LBP is the commonest case, also we found other cases of serious disease which presented as non-traumatic LBP.

### Case Report :

A male patient 41 years old gentleman presented with non-traumatic low back pain from 2 weeks back, 3 days back he cannot walk well . Normal muscle tone in both lower limbs. NO pain referred to the lower limbs . NO sign of cord compression: no urine incontinence, he can controlled the defecation and he denies any numbness or tingling in both lower limb . Look like sick face. His vital signs were stable. No history of fever or cough.

Patient had x ray from privet clinic that showed: osteolytic lesion in Lumbar 3,4 and 5 . X ray has been repeated in our ED and showed the same result as the previous one.

The CT scan showed osteolytic lesion at Dorsal 12 , Lumbar 3,4and 5 with suggestion of TB or metastatic boney lesion .

The patient has been admission by medical team after orthopedic consultation .

The MRI showed: extensive pathological marrow infiltration of the vertebral column with impression of metastatic deposit .

The pathological report mentioned: moderately differentiated metastatic adenocarcinoma. The lung would be high on list of possibility , however thyroid , pancreas and Bellary tract cannot be exclude . The patient was under care of orthopedic and oncology teams. On file review, no history of co morbidity only bronchial asthma from 2 years back. He diagnosed as non-small cell lung cancer.



### Discussion :

Low back pain (LBP) is the fifth most common reason for all physician visit (1,2). The most frequent visit of the non-traumatic LBP is benign, self-limited. However, the LBP some time is the alarm of dangerous killer disease. Emergency physician must develop strategies to identify the majority of patients who require nothing more than history and physical examination and identify those with serious cause (3). Acute non traumatic LBP can be divided into 3 categories: 1benign ,self-limited musculoskeletal cause, 2-spinal pathologies that can cause severe neurological disability because spinal cord compression or caudal equine damage and3-othernon-spinalcause like abdominal or retroperitoneal that may be serious.(3)

The key stone to determine the cause of non-traumatic LBP is the history and physical examination. We suggest the patient response to the pain management may guide to the cause of non-traumatic LBP .

The patient non traumatic had low back pain from 2 week without any neurological deficit , he cannot walk well from 3 days because the LBP and he denies any trauma. May like sick face due to the pain. He is lucky because he got the x ray lumbar from the privet clinic by privet doctor that was the key to diagnose his disease . According to evidence based practice an image should after 4 to 6 weeks from the onset if the patient has no neurological deficit .

### Conclusion :

- The history in detail and good examination is the key to determine the cause of LBP, so the patient can get the proper management for his disease.
- The lumbar X ray may recommended in sick patient with non traumatic LBP even if the duration less than 2 weeks
- Recent Asthma diagnosed in middle or old age need further investigation

### Referances :

1- Bigos S, Bowyer O,BraenG,etal.AcuteLow Back Problemsin Adults. Clinical Practice Guideline No.14. AHCPRPublication No.95-0642. Rockville, Md.: Agency for HealthCare Policy andResearch, Public Health Service, U.S.DepartmentofHealth andHumanServices.December 1994. Available athttp://d4c2.com/d4c2-000038.htm.Accessed November 21, 2012.  
2- Goertz M,Thorson D,Bonsell J,etal.Institute for ClinicalSystems Improvement. Adult acuteandsubacute low backpain.UpdatedNovember 2012. Availablreat:https://www.icsi.org/\_asset/bjvqrj/LBP.pdf. Accessed March 18, 2013.  
3- Jonathan A.Edlow.,Managing Nontraumatic AcuteBack Pain,Annals of Emergency Medicine. Volume 66, No.2:August2015.