Clinical application of DR in the diagnosis and differentiate diagnosis of vertebral tuberculosis

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View from specialist: It is creative, and of certain scientific and educational value.

[ABSTRACT] Objective: To evaluate the clinical value of digital radiography (DR) in the diagnosis and differentiate diagnosis of vertebral tuberculosis. Methods: A total of 68 suspected vertebral tuberculosis cases admitted to our hospital during September 2009 to February 2011 underwent DR and the conventional X-ray photography examination. Displayed results under both DR and X-ray photography were compared with the pathological results revealed after operation. Result: Compared pathological results, the sensitivity, specificity and accuracy of DR were 93.5% (43/46), 54.5% (12/22) and 80.9% (55/68), significant higher than the 84.8% (39/46), 40.9% (9/22) and 70.6% (48/68) of X-ray photography. Besides, DR was superior to X-ray for revealing paravertebral abscess and osseous damage of vertebral bodies (P<0.05). Conclusions: DR is of higher diagnostic value for revealing vertebral tuberculosis and relevant lesions than the conventional X-ray photography and can also help to prevent occurrence of disability.

[KEY WORDS] Vertebral tuberculosis, Digital radiography, Conventional X-ray photography; Photographic diagnosis