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	<b>Diploma</b>
<b>Thesis Title</b>	<b>Agreement off Histopathological Examination with Gold Standard PCR Technique in the Diagnosis off Extra pulmonary Tuberculosis a Step to Overcome False Diagnosis</b>
<b>Year</b>	2015-2016
<b>Abstract</b>	<p><b>Background</b>  During the last decade, remarkable progress has been made in the diagnostics of pulmonary tuberculosis; however, diagnostic challenges in extrapulmonary tuberculosis (EPTB) remain to be addressed. Diagnosis of EPTB is difficult due to the pauci-bacillary nature of disease, the variable clinical presentation, and need for invasive procedures to secure appropriate sample, and lack of laboratory facilities in the resource-limited settings. A more accurate test to diagnose various forms of EPTB, which can easily be incorporated in the routine TB control program, would contribute significantly towards improving EPTB case-detection and thus reducing the morbidity and mortality.</p> <p><b>Materials and Methods</b>  A cross- sectional descriptive study at AL-Kindy Teaching Hospital at Al- Resaffa part of Baghdad city, Iraq. Samples collection has been done in three months duration (July, August and September). A total of 74 samples from suspected EPTB cases were received for polymerase chain reaction (PCR) testing of <i>M. tuberculosis</i> and histopathological examination. The study was mainly laboratory-based and the institutional ethical committee clearance was obtained to conduct the study. The samples were transported immediately after collection, to the laboratory.</p> <p><b>Results</b>  A total of 74 samples (18 male, 56 female), 2-58 years old, mean age 29.72 suspected to have xtrapulmonary tuberculosis underwent biopsies from different samples. The biopsies from 74 patients was taken from different tissues according to the site of lesion, 49 (66.2%) biopsies was taken from lymph node, 12 biopsies (16.2%) was taken from axillary mass, 6 (8.1%) from abscess, 4(5.4%) from</p> <p><b>Abstract</b>  Fintestine, 3(4.1%) from fistula. Of the 74 studied samples 57 (77%) showed positive PCR and 17(23%) showed negative PCR result. Regarding to the biopsies there were 54 (73%) samples had positive histopathological (granuloma) result and 20 (27%) samples had negative results (non-granuloma). The sensitivity of histopathological examination of the biopsies was 91.02%, the specificity 88.2% and the kappa was 0.748 (p value less than 0.05) which is mean good agreement between histopathological examination of the biopsies and the polymerase chain reaction test.</p> <p><b>Conclusions:</b>  1- The sensitivity and specificity of histopathological examination of biopsies were 91.02% and 88.2% respectively 2- The kappa was 0.748 (p value less than 0.05) which is mean good agreement between histopathological examination of the biopsies and the polymerase chain reaction test.</p> <p><b>Recommendation</b>  1- In order to increase diagnostic accuracy, it is better to interpret histopathologic features in conjunction with PCR results. Despite the efficiency of complete DNA extraction for the rapid diagnosis by PCR of extrapulmonary tuberculosis, the false-positive results challenge our understanding of PCR result.  2- Use PCR as a key factor to decide whether presumptive anti tuberculous treatment should be maintained or discontinued thereby contributing to decreased costs and decreased potential toxicity related to prolonged unnecessary therapy.  3- Further studies with larger sample size required</p>