

Abstract

Twenty – five synovial fluids were collected in the present study from patients attending to orthopedics and rheumatology clinics in Basrah handled by physicians ,and they have been found that 25 specimens (14 men and 11 women)with different age groups .When samples were inoculated on monophas – diphasic culture setup (MDCS) from September 2007 to July 2008 , after that time the samples were inoculated on mycoplasmas modified medium (MMM) system from Aug 2008 to Jan 2009. The results of the current study revealed isolation of 11 isolate represent mycoplasmas causing septic arthritis .After conducting the diagnostic test and biochemical diagnosed with three types of mycoplasmas that as 8(32%) for *Mycoplasma salivarium* , 2 (8%)for *Ureaplasma urealyticum* and 1(4%) for *Mycoplasma fermentans* .Whereas (36 %) represent negative cultivation and(16% ,4%) for *Staphylococcus aureus* and *Streptococcus pyogenes* respectively . On the other hand found 24 % represents *M salivarium* isolate from male compared with 8% isolate from female .No mycoplasmas isolated from patients less then 20 years in contrast high percentage (12 % and 8%) represents *M. salivarium* isolate from 31- 40 and 41 – 50 years respectively and 4 % represent *M. salivarium* isolate fro 61- 70 years exhibit the relationship between age ,sex and infected synovial membrane with mycoplasmas. The specimens were more frequency in the knee (92%) followed by ankle (8%) while not collected any sample from of the other joints. The present study leads to the isolation *M. salivarium* ,*U. urealyticum* and *M. fermentans* as first time from synovial fluid in Iraq. Also , prepared suitable medium for the isolation of mycoplasmas .The modified mycoplasmas medium (MMM) which was faster , easier and inexpensive , most of supplements it found on need and not cause any pain to horse when blood aspiration from it.