Brucellosis is zoonotic disease of worldwide distribution and still remains endemic in some developing countries. Clinical presentation of this systemic disease may be acute, insidious or chronic. The disease mimics many illnesses and presents diagnostic difficulties. Automated blood culture system and ELISA proved useful as new laboratory based diagnostic method. Although various regimens have been used in the treatment, a combination of doxycycline and rifampicin is the best treatment for human brucellosis. Here we present two cases of brucellosis who presented with history of fever, cough and weakness. On routine investigations anemia and hepatitis were present, bone marrow examination revealed non-caseating granuloma. In both these cases history and bone marrow findings mimicked chronic inflammatory condition like tuberculosis but final diagnosis of brucellosis was made on basis of bone marrow and blood culture results which were positive for Brucella.