ABSTRACT:
Background: Brucellosis is one of serious bacterial infection and has a considerable mortality in endemic countries. As signs and symptoms of the infection overlap with many other infectious conditions, it poses a challenge for clinical diagnosis. Methods: We report a first case of culture proven case of brucellosis. A 15 year old male child referred to our hospital for fever of two and half months. Patient was evaluated by serological tests for enteric fever, malaria, rickettsial infections and blood was sent for culture. Brucella melitensis was isolated from blood culture. Serum showed significant titres of brucella antibodies. Patient responded to specific therapy of rifampicin and doxycycline treatment. Conclusion: Brucellosis is endemic in our country, it must be considered when evaluating all cases of prolonged fever.

KEYWORDS: Brucella, PUO, Blood culture.

Discussion
Brucellosis Is An Important Public Health Problem Worldwide. In India, It Is Predominantly An Occupational Disease Occur-ring In Farmers, Veterinarians And Abattoir Workers. People Involved In Agriculture, Animal Husbandry, Are In Close Con-tact With Domestic Animals Are At Increased Risk For Acquir-ing Brucellosis.

Brucellosis Mimics Many Clinical Conditions Making It Difficult To Suspect Or Diagnose Clinically. Typhoid, Malaria, Tuberculo-lis, Rheumatic Fever, Autoimmune Diseases Mimic Human Brucellosis Posing A Problem In Starting The Specific Treatment Early. Many A Time, Uncharacterized Fever Is The Only Major Clinical Presentation In Most Of The Cases. Hence Brucellosis Should Be Kept As One Of The Differential Diagnosis When Evaluating Cases Of Puo And Detailed History Must Be Sought In All Suspected Cases.

Brucellosis Can Be Presumptively Diagnosed By Demonstrating High Or Rising Antibody Titers To Specific Brucella Antigens. They Are Useful As A Screening Test In Patients With Sugges-tive Clinical Features. And They Are The Main Stay Tests In Diagnosing Culture Negative Cases. Routine Serologic Surveil-lance Is Essential In Detecting More No Of Cases. Isolation Of The Organism Is The Only Standard Method To Confirm Diag-nosis. By Gram Stain, Modified Ziehl -Neelsen Staining Along With Urease Test, It Is Possible To Identify The Organism To The Genus Level, Which Is Vital In Institution Of Appropriate Antibiotics.

Symptomatic Cases Among Family Members Is Common, Hence All Family Members Of Index Case Needs To Evaluated To Detect Unrecognized Cases. We Screened Sera Of Grand-mother & Parents Who Stay With The Patient But All Sera Showed Negative Results By Sat.

Madhukar Et Al In 2014 Have Isolated Three B. Melitensis & Two B. Abortus In Human Samples In Mysore. This Study Clearly Shows The Presence Of Brucellosis In This Geographical Area. Seropositivity Has Been Reported On Several Instances In The Past, But This Is The First Culture Proven Case Of Brucello-sis From Our Hospital.

Our Patient Was From Agricultural Background With Cattle In The House. Raw Milk Consumption Was The Source Of Infections In This Case. The Patient’s Sibling Died Due To Similar Complaints Along With Jaundice And Thrombocytopenia, The Cause Of Death Was Not Evaluated In That Case, Brucellosis Might Have Been Cause In The Case Which Was Missed Because Of Lack Of Suspicion. The Mental Retardation In This Patient Could Have No Contribution To The Infection, Except That There Might Have Been Lapses In Optimum Nutrition And Inadvertent Consumption Of Raw Milk In A Child Caring ForWhich Might Have been A Strenuous Task For The Parents.

Brucellosis Poses Significant Diagnostic Challenges To Cli-nicians, Due To Its Non-Specific Presentations, And The Low Clinical Suspicion Of Clinicians. Therefore, All Patients Must Be Evaluated By Blood Culture And Serology For Brucella In Addition To Routine Work Up In Diagnosing The Cases Of Fever.

REFERENCES