Abstract—Middle aged male with fever of 3 weeks duration, was referred to us as a case of vasculitis; he presented with abdominal wall abscess, septic arthritis of the right knee joint, acute respiratory distress, disseminated intravascular coagulation and renal failure. Initial treatment consisted of urgent intubation with ventilation, arthrotomy with synovectomy and drainage of the abdominal wall abscess. `Burkholderia pseudomallei were isolated from blood culture, synovial fluid culture and culture of anterior wall abdominal aspirate, sensitive to Imipenem and Cotrimoxazole, suggesting melioidosis. He improved steadily with Imipenem and was discharged on Cotrimoxazole, to be strictly consumed for the following 3 months to avoid relapse.

Melioidosis is emerging in India probably secondary to the global aborted blood environmental pollution and contraceptive menstrual blood pollution [e.g. small family norms] evidenced by documented rising environmental estrogen, alpha feto protein, β human chorionic gonadotropins in river and sea waters and air. (Epidemics of Ebola virus disease can have similar roots)

Keywords—Melioidosis; multifocal abscesses; Burkholderia pseudomallei

Case details

This gentleman aged 45 years, was referred to us with a tentative diagnosis of vasculitis and splenic infarction; he presented with fever and abdominal pain of 3 weeks duration, accompanied by 10 days of cough with expectoration, 7 days of dyspnoea and 3 days of right knee joint pain with swelling. Past history of diabetes mellitus and systemic hypertension, of 2 to 5 year’s duration, with irregular treatment, was present. He had a 30 year history of ethanol consumption.

At the time of presentation, he was normotensive but he was tachypnoeic with a respiratory rate of 40/minute and he had tachycardia with pulse of 130/minute. Auscultation of his lungs revealed crepitations with rhonchi heard at the base Figure 2. His left para-umbilical region of the abdomen was tender; his right knee joint was tender and inflamed Figure 1; he was drowsy but he did not have neck stiffness.

Blood investigation identified neutrophilic leukocytosis of 81%, elevated serum creatinine of 2
mg/dl, initial arterial blood gas suggested metabolic acidosis with type 1 respiratory failure, which improved on serial follow up blood gas analysis, as clinical condition improved; bilirubin was elevated to 5.6 mg/dl, alkaline phosphatase was elevated at 257 U/l, suggesting an infiltrative pathology; there was thrombocytopenia of 93,000/c.mm with deranged coagulation parameters suggesting sepsis with disseminated intravascular coagulation (DIC) and multigorgan dysfunction. Blood culture grew non fermenting *Burkholderia pseudomallei* sensitive to Imipenem and cotrimoxazole. The organism was characterized by standard biochemical tests and confirmed by Vitek. Antibiotic susceptibility was done by Kirby Bauer technique and results were interpreted by CLSI guidelines. Melioidosis was considered.

Ultra sonogram of the abdomen showed an ill defined lesion with heterogeneous echogenicity in the left para umbilical region suggesting a hematoma. Aspirate of this lesion suggested abscess and its culture grew *Burkholderia pseudomallei*. Synovial fluid culture also grew the same organism.

The abdominal wall abscess was surgically drained. An arthrotomy with synovectomy of right knee joint was undertaken and synovial tissue sent for culture also grew *Burkholderia pseudomallei* suggesting melioidosis. He required supportive ventilation initially, and during aspiration of abdominal wall abscess, arthrotomy with synovectomy, for about seven days; He was treated with the sensitive antibiotic Imipenem, at the dose of 500 mg thrice daily from the fourth day, for 14 days.

Repeat blood cultures after 7 days were sterile and he made a remarkable recovery. He received mobilizing treatment with physiotherapy and was discharged 3 weeks after admission, with strict recommendation to continue Cotrimoxazole for 3 months to prevent relapse.

**Discussion:**

*Burkholderia pseudomallei* are a saprophytic bacterium present in the moist soil of the tropics of South East Asia and North Australia. It is endemic in Thailand and is recognized as a major cause of community acquired septicemia; 1 in contrast, melioidosis was not endemic in the Indian subcontinent 2 although melioidosis had been documented in Bengali men settled in London (UK). It has an incubation period that varies from a few days to many years. It is frequently associated with diabetes mellitus 3 and ethanol consumption. 4 Presentation of melioidosis as chronic suppurative joint effusion is rare 5 in India, diagnosed with difficulty and can result in mortality.

Recently a retrospective study of 32 culture proven cases 6 of melioidosis was undertaken to analyze the clinical presentation and epidemiological risk factors for melioidosis in India; mean age of presentation was 42.5 years of age though it was diagnosed from 4-60 years of age; more than 75% were males, mostly from rural areas; mean duration of symptoms before diagnosis was 2.34 months; >50%[56.25% presented as disseminated disease, with remainder as septic arthritis or abscesses; 75% of patients were treated successfully with Ceftazidime followed by Doxycycline or Cotrimoxazole.

Clinical cases are recently reported from the states of Tamil Nadu, Kerala, Karnataka, Maharashtra, Orissa, Assam, West Bengal, Pondicherry and Tripura in India, hence 45 samples 7 of soil from Parangipetttai of Tamil Nadu were screened for prevalence of *Burkholderia pseudomallei* and 4 isolates were identified by bacteriological and molecular methods.

In 2007, 154 samples of soil, 130 samples of water from several 8 locations in Guangxi of China were screened for *Burkholderia pseudomallei* by culture, sensitivity and Polymerase chain reaction for species specific; none of the water samples contained the organism; all positive samples were confined to single low lying region from rice paddy fields.

Melioidosis often presents as abscesses in multiple sites, including musculoskeletal system. Although rare, septic arthritis is a recognized feature of melioidosis, as mentioned in the 20 years prospective study 9 undertaken in Australia, which quoted an incidence of 2.6%-4% of septic arthritis. From clinical presentation, it is difficult to differentiate melioidosis from other causes of arthritis.

Melioidosis can be fatal 10 14% mortality rate is reported. It has been documented in the 11 literature, that Ceftazidime reduces mortality by 50% in severe melioidosis. Treatment for prolonged period of 3 months after discharge is warranted, otherwise melioidosis can recur. Septic arthritis 12 arises from hematogenous dissemination of the organism or contiguous spread from neighboring tissues. Arthrotomy, synovectomy, drainage of abscesses, ventilation, with appropriate sensitive antibiotic therapy [Imipenem] was rewarding in our patient.

Melioidosis’ is detected in Indian soil with increasing prevalence probably, due to globally increasing environmental aborted blood, contraceptive menstrual blood [including small family norms, one child policy] pollution 13 evidenced by rising environmental estrogen in air, water which is documented in 1998, 1994 by Professor Paul Devroey 14 and Dr. Susan Jobling 15 respectively;

863,000,000 reported surgical abortions till 2010 × 4200 pg of estrogen× 350ml blood loss/abortion= environmental estrogen or

498 abortions/minute× 60 minutes× 24 hours×365 days× 50-80 years of global contraception practice ×4200 pg of estrogen/ml blood loss × ~350ml.

minimum blood loss/abortion= environmental estrogen

When a mother is blessed for e.g. with 10 children she will not menstruate for 200 months or 20 years; whereas after contraception:-
1,989,375,754 women of 15-50 years × 200 months × 300 pg/m of estrogen × 350 ml menstrual blood loss = environmental estrogen. 

Global environmental estrogen increase = global innocent aborted blood, contraceptive menstrual blood contained air-inhalation, water ingestion = environmental aborted blood, contracpetive menstrual blood contaminated.

Our analysis of sea, river waters detected estrogen, alpha fetoprotein, β Human chorionic gonadotropins confirming further, aborted and contraceptive menstrual blood pollution of the environment.

Contraceptive menstrual blood, aborted blood being a very good media for incidence, prevalence of viruses namely Human immunodeficiency virus, Hepatitis A, B, C, D, E viruses, SARS, Chikungunya, Dengue, H1N1, Extended spectrum of Beta lactamase production, drug resistance of microbes including tuberculosis, (inherently less virulent), polyvalent strains of varicella, making vaccines ineffective;

Environmental pollution with aborted blood, contraceptive menstrual blood is a rich media for emergence, growth and virulence of organisms resulting in infectious diseases including Melioidosis; increasing incidence, virulence of fungal rickettsial infections and vector-mosquito borne diseases [since mosquitoes’ food = blood is made freely available in the environment by contraception, abortions] are also increasingly prevalent. 

A saprophyte “Burkholderia Pseudomallei” has increased in prevalence in India, wherein it was not endemic prior to implementation of contraception, abortion in the name of small family norms; [Ebola virus disease’ epidemics can have similar roots in the globe]

Conclusion:

Since melioidosis presenting as septic arthritis is uncommon in India, the diagnosis of melioidosis was not established for 3 weeks prior to admission.

We present this report to highlight a neglected tropical disease emerging as community acquired septicemia, multi organ dysfunction, multifocal abscesses, septic arthritis requiring adventurous arthrotomy, synovectomy, drainage of abscesses and ventilator assistance and appropriate antibiotic administration. Melioidosis is associated with significant mortality. Emerging Melioidosis [epidemics of today’s Ebola virus disease] is probably secondary to global aborted blood, contraceptive menstrual blood environmental pollution, being a rich media for microbial growth, virulence.

Publication that helps create awareness, of an apparently increasing incidence of Burkholderia pseudomallei sepsis in India, may enable early diagnosis, by appropriate cultures, followed by treatment with antibiotics, to be continued for 3 months after discharge, to prevent relapse and thereby reduce the associated mortality.

PATIENT CONSENT

The authors, Natarajan N; Samuel EJ; Periasamy S; Natarajan V; Daniel J; KB Latha, Rassou D Declare They have obtained written, informed consent for the publication of the details relating to the patient in this report.

1. All possible steps have been taken to safeguard the identity of the patient.

This submission is compliant with the requirements of local research ethics committees.

References


6. Gopalakrishnan R, Suresh Kumar D, Thirunarayan MA, Ramasubramanian V: Melioidosis an emerging infection in India; JAPI 2013 Sep; 61(9): 612-4

7. Prakash A, Thavaselvam D, Kumar A, Arora S, Tiwari S, Barua A, Sathyaseelan K: isolation,


13 Anjali Rajudhyaksha, Archana Sonawale, Shruti Khare, Chetan Kalal Rahul Jankar: Disseminated Melioidosis presenting as septic arthritis ; JAPI, June 2012,vol.60


18 Samuel EJ, Joseph V, Susan P, Jobin John: Increased prevalence of solar keratoses, infectious diseases and rising environmental estrogen equating with aborted blood, contraceptive menstrual blood pollution with consequent ozone depletion; IOSR Journal of Environmental Science, Toxicology and Food technology; volume 8, Issue 9, version I (September 2014),pages 75-79 http://www.iosrjournals.org/iosr.jestft/pages8(9)Versio n-1.html