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Disseminated Tuberculosis in A Vaccinated 8 Year Old Child -Case Report

Chinyelu Uchenna Ufoaroh [1,4]; Victor Ifeanyichukwu Modekwe[2,4]; Somto Celestine Ngonadi[3,4]; Ejike Chiedozie Okoli [4]

[1]Department of Internal medicine Nnamdi Azikiwe University
[2]Department of surgery Nnamdi Azikiwe University
[3]Department of paediatrics Nnamdi Azikiwe University Teaching Hospital
[4]Daystar specialist hospital Anambra State
Correspondence: Dr. Victor I Modekwe Email: victormodekwe@yahoo.com

Objective: To highlight the possibility of disseminated tuberculosis in a BCG vaccinated child

Case Report: An eight-year-old female who presented with a 3year history of recurrent fever, increasing abdominal swelling, neck swelling and progressive weight loss. She had cough at the onset of symptoms but cough however has stopped, child was vaccinated at birth with BCG, no contact with chronically coughing adult, has drenching night sweats ,last of 4 children, both parents separated, examination revealed a chronically looking child febrile(temp 37.9oc),pale, puffy face, fluffy hair, bilateral pitting pedal oedema, pustular rashes interdigital webs, umbilicus, gluteal cleft; cervical lymphadenopathy tender, matted together 3cmx3cm,hepatosplenomegally and ascites. MTB genexpert of the salivary fluid was positive for MTB; severe hypoalbuminaemia 0.7g/dl, Hb 6.7g, ESR 43mm/hr.Cervical lymphnode biopsy histology showed caseous granulomatous lesions. Diagnosis of Disseminated tuberculosis in a malnourished child and generalized scabies were made, she was subsequently commenced on anti-tuberculous drugs, it D3, vit B6, Zinc gluconate, ivermectin, permethrin cream, high protein diet and transfusion. She is currently on the continuation phase of the anti Tb drugs with significant improvement
Discussion: Tuberculosis disease is uncommon in children vaccinated at birth as BCG has been shown to offer protection for 10-15years, however in the scenario of severe immunosuppression like in certain of HIV infection, malnutrion, cancers, tuberculosis infection and disease can occur. Making diagnosis of Disseminated tuberculosis in children may be delayed because of tissues and organs involved, majority of the children do not produce sputum as most swallow the sputum and difficulty accessing tissues for histology. This was the case in the index child where diagnosis was made after 3 years of onset of symptoms. Severe protein malnutrition and low socioeconomic class may have been the risk factor for disseminated tuberculosis infection in the index case similar to the findings of Caleb Attah et al.

Conclusion: DTB in BCG vaccinated child can occur from reactivation of latent Tb or new infection following severe immune suppression. High index of suspicion, availability of tissue for histology aids early diagnosis and treatment.

Key Words: DTB, vaccinated, malnutrition

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