

Non-Typhi Salmonella chest wall abscess: A Case Report

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Introduction

There are two types of salmonella, typhoidal and non-typhoidal. Non-typhoidal salmonellosis refer to illnesses caused by all serotypes of Salmonella, excluding Typhi, Paratyphi A, Paratyphi B and Paratyphi C [1, 2, and 4]. Non-typhoidal salmonellae cause food borne illness [1, 2]. Also can seed any anatomical site hematogenously. Extra-intestinal manifestations of non-typhoid Salmonella accounts for less than 1% of the reported cases [1, 2]. Here we have a case of 40 year old male with chest wall abscess caused by salmonellosis leading to osteomyelitis.

Case report

A 40 year old male presented with dull, 4/10, non-radiating pain on the right upper chest region. He stated that he has lost 25 lbs in the past 4 months. Patient also has notices a mass on the chest wall that has been increasing for the past few months. Patient has a PMH of uncontrolled DM type II on Metformin. He has a family history of his mother with breast cancer. His blood glucose was 504 with an HbA1c of 13. No WBC, no fever, no SOB, no cough, no discharge.

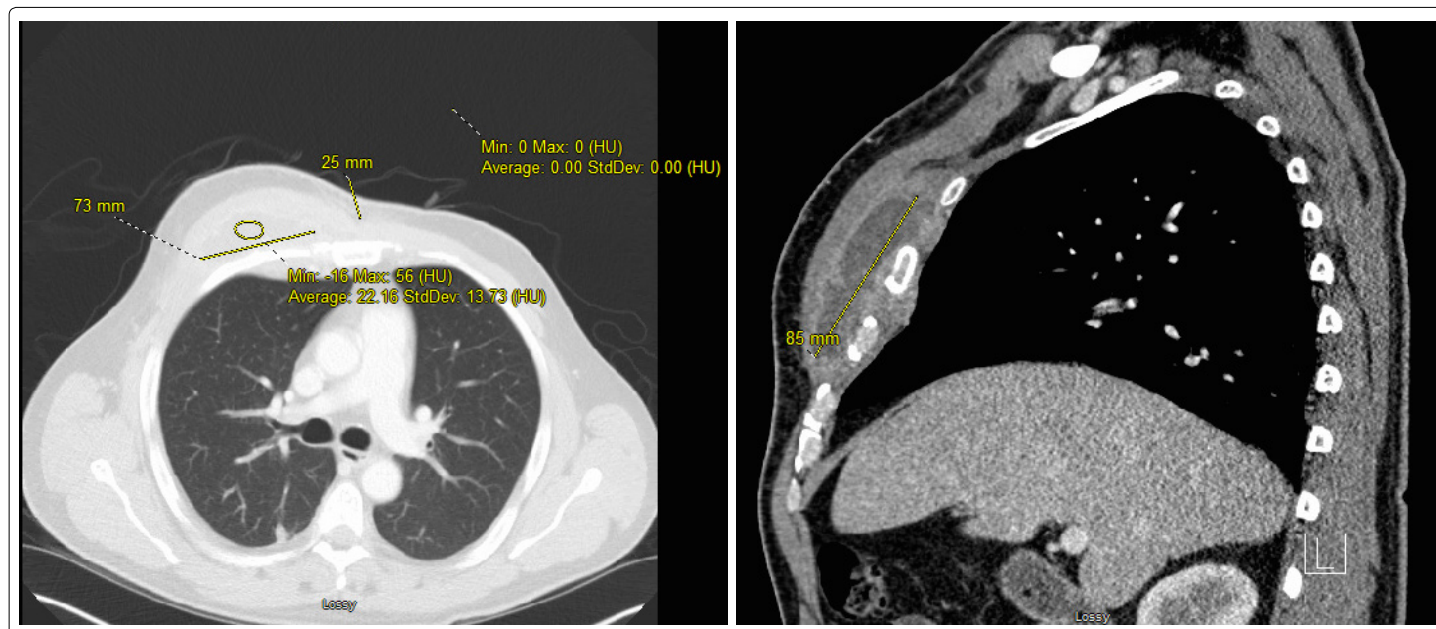


Figure 1: CT chest showed: Right sided chest wall abscess measuring 7cm by 2 cm by 9 cm.

Patient was sent for physical therapy and he was readmitted after a week due to intense pain, fevers/chills and increased size of the right chest mass since in figure 1. Patient had an elevated WBC, fever, and chills. Chest wall shows 7cm by 2 cm by 9 cm mass and pectoralis muscle strain with a large sub pectoral lesion either organizing hematoma or hemorrhage within a pathologic lesion. There were sclerotic rib changes involving the second third and fourth ribs anteriorly adjacent to the lesion. A portion of the lesion

extend deep in to the anterior pleural space into the right hemi thorax. Blood cultures were negative and IR guided abscess drainage was done, wound cultures from the chest mass grew Salmonella Non-Typhi. Patient was diagnosed with chest wall abscess with osteomyelitis and patient remain hemodynamically stable, improved on Ceftriaxone 2g daily and discharged home to continue with Levaquin 750mg daily 6 more weeks.

Discussion

Salmonellae are gram-negative facultative anaerobic bacilli that belongs to family Enterobacteriaceae [2, 6]. Less than 10 cases of extra-enteric chest wall abscess cases have been reported, to the best of our knowledge [2, 6]. Ingestion of food such as undercooked meat, dairy products, contaminated water. After salmonellae have entered the bloodstream, they have a capability to metastasize and cause a focal suppurative infection of almost any organ. Extra intestinal salmonellosis can manifest as urinary tract infections, endovascular infections, endocarditis, meningitis, osteomyelitis, pneumonia, and soft-tissue and other visceral involvement [1, 2, 6]. Poorly controlled Diabetes Mellitus has an increased susceptibility to infections, which is largely attributable to an altered immune response due to chronic hyperglycaemia [2, 3, 4]. Seen in our patient, who's hyperglycaemia could have been the reason for patient immunosuppressed state leading o chest call abscess with salmonellosis. Treatment of choices are fluoroquinolones and third generation cephalosporins for to 6 weeks or more. Extra-intestinal non-typhoidal Salmonella infections generally warrant surgical drainage or debridement in addition to prolonged antimicrobial therapy [5, 6]. The purpose of our case report to bring the light to a rare yet interesting diagnosis of Non-Typhi Salmonella chest wall abscess. Moving forward the findings in this case can help to identify rare cases of Non-Typhi Salmonella chest wall abscess.

References

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