INTRODUCTION

Coccidioidomycosis, also known as Valley fever or San Joaquin fever, is an endemic disease of the western hemisphere caused by the dimorphic soil dwelling fungus Coccidioides immitis. Most human infections are caused by Coccidioides immitis.

Coccidioidomycosis may vary from a clinically inapparent infection to a severe or fatal mycosis. Most common site of involvement is lung followed by skin, bones, joints and meninges.

Clinical dissemination outside the thoracic cavity occurs in fewer than 1% of infected individuals.

CASE REPORT

A 28 year old man presented to Surgery department of RIMS, Ranchi with complains of right sided neck swelling from 8 months. There was no history of trauma, fever, pain, weight loss or tuberculosis. He is a farmer by occupation and has never been outside India his entire life.

On examination there was a soft well circumscribed lump present on right side of neck measuring 4cm by 2.5cm by 2.5cm without any discharging sinus. Systemic examination of the patient was normal. Tests results including CBC, routine urine, RFT, LFT, mantoux test, and chest X-ray were within normal limits. ZN staining for acid fast bacilli was negative.

Ultrasoundography of the neck showed a heteroechoic lesion measuring 5cm by 2.5cm by 2.5cm abutting right submandibular gland. Clinical possibility of infected branchial cyst was considered and tissue was sent for histopathological examination.

DISCUSSION

Coccidioidomycosis is confined to the Western Hemisphere between the latitudes of 40° N and 40° S. The reason for the disease not being prevalent in India might be attributed to the lack of optimum conditions such as the semi-arid climate and the flora for the fungus to thrive.

Exposure to the soil containing spores is the only risk factor for acquiring the disease. This exposure usually occur during windstorms, farming, digging, and construction which lead to development of the disease. Our patient was a farmer by occupation.

Histopathological examination of tissues is considered to be more valuable and easier to perform as culture and molecular diagnostic modalities are not routinely available in laboratories in the non-endemic regions. For fixed tissues, identification of spherules ranging in diameter from 20 to 200 µm without budding with surrounding granulomatous inflammation demonstrated with H and E staining under microscopy is diagnostic of coccidioidomycosis, which is very clearly present in this case. H and E staining can easily distinguish typical morphological structures of coccidioidomycosis spherules and can also differentiate it from budding yeast forms of Blastomyces, Histoplasma, or Cryptococcus.

In our patient, morphological features on histology confirmed the diagnosis for coccidioidomycosis. There is no original case report of this disease in India till date however; four imported cases have been reported from Mumbai, Chennai, Bangaluru and Ludhiana.

CONCLUSION

Coccidioidomycosis is extremely rare in India and most of them have a history of travel to endemic regions. This report emphasizes the importance of occurrence of this unusual exotic disease in Jharkhand where patient had no history of travel to endemic regions. It is also important to know that coccidiodes can rarely thrive in the soils of non-arid regions and manifest the disease

REFERENCES