Original Research Paper

Volume - 11 | Issue - 10 | October - 2021 | PRINT ISSN No. 2249 - 555X | DOI : 10.36106/ijar

General Surgery

A CASE REPORT ON ATYPICAL PRESENTATION OF ACTINOMYCOSIS

Dr Karan Gupta Post Graduate Resident In General Surgery Osmania General Hospital , Hyderabad , T.S.

ABSTRACT Actinomycetes israelii is a gram positive bacteria,causing chronic spreading suppurative and granulomatous disease, which forms sulphur granules[1] discharging sinuses. **CASE REPORT** : A 55 year old female P/W swelling in lower abdomen since 6 months and associated pain, known Diabetic and Hypertensive . O/E - 8x4x2 cms elliptical,firm,mildly tender swelling with ill-defined margins,smooth surface,skin over the swelling normal , immobile ,becoming prominent on leg raising is palpated in the right iliac fossa , extending partly into the hypogastrium. The clinically palpable mass on TRUCUT biopsy showed collection of acute on chronic inflammatory cells and basophilic filamentous bacterial colonies showing Splendore-Hoeppli phenomenon S/O Actinomycosis.Upon Rx with Inj Gentamicin 60mg/IV/TID x 10d and Tab Doxycycline 100mg/BD x 30d ,patient responded with resultant decrease in discharge from the sinus.

KEYWORDS : Actinomycosis of Abdominal wall ; Splendore-Hoeppli phenomenon ; Atypical presentation P/W - Presented with ; O/E - On Examination

INTRODUCTION

Actinomycetes israelli is a gram positive bacteria , causing chronic spreading suppurative and granulomatous disease , which forms sulphur granules [1] discharging sinuses. This is a rare infection presenting in the skin , and is seen in rural tropical areas and in agricultural workers. In adults , it affects male more than females , however occurrences in <10 years age is unusual. Pathogenic anaerobic Actinomycetes are normal inhabitants of the human mouth and Actinomycosis is therefore acquired endogenously. In the tissue , organisms form granular colonies , from which radiate delicate mycelial filaments surrounded by neutrophilic and lymphocytic infiltrate , extends towards skin forming sinuses.It differs from mycetoma in being caused by endogenous and anaerobic agents and having no tendency to be confined to extremities. In females , use of IUCD is associated with pelvic actinomycosis.

CASE PRESENTATION

A 55 year old female presented with swelling in the lower abdomen for 6 months, with history of granular discharge since 1 month, Associated with pain - throbbing type , non radiating and non referred. No history of fever , trauma , bowel or bladder disturbances. Known case of Diabetes mellitus type 2 and Hypertension - controlled with medication. On Examination : 8x4x2 cms elliptical , firm , mildly tender , indurated swelling with ill defined margins , smooth surface , skin over swelling normal , immobile , becoming prominent on leg raising is palpated in right iliac fossa , extending partly in hypogastrium.

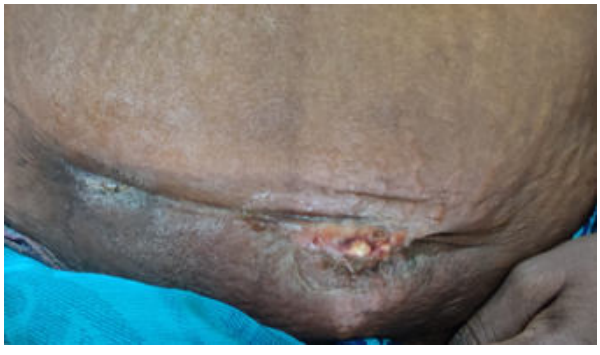

Figure 1 : Patient at the time of presentation.

CLINICAL COURSE

BLOOD TESTS	Hb - 10.8 gm% WBC - 15,000/mm3 PLC - 4.4 lakh/mm3 T.Bilrubin - 0.4mg/dl ALT - 9.5 U/L ALP - 97 U/L Sr Creatinine - 1.07 mg/dl
USG ABDOMEN & PELVIS	An ill defined heterogenous hypodense lesion with hyperechoic areas m/s 10x5x7.5 cms with internal vascularity is seen in pelvis
FNAC OF SWELLING	Sheets of neutrophils,degenerating cells,plenty of cyst macrophages showing emperopolesis and tingible body macrophages F/S/O Suppurative lesion.
PLAIN CT ABDOMEN	E/o ill defined soft tissue density lesion m/s 10.2x5x6 cms noted in anterior abdominal wall involving hypogastrium extending into subcutaneous plane through both recti muscle.
CECT ABDOMEN REPORT	10x3.5x5.4cms heterogenously enhancing ill defined soft tissue density lesion noted in hypogastric region extending into RIF,encasing right inferior epigastric artery and branches. B/L elnagrged external iliac and inguinal lymph nodes.

DISCUSSION

Abdominal Actinomycosis [2] begins in appendix/cecum manifesting as appendicitis , slow growing mass. It is a normal inhabitant of the mouth and is thought to reach GIT through it. Liver involvement with resulting jaundice is frequent. Blood involvement is rare. The organism may extend into the abdominal wall with resultant sinus tract appearing on the skin surface. Pelvic actinomycosis is associated with the use of IUCD[3] and the skin is unaffected. Diagnosis should be confirmed by culture of discharge. Granules which are 1-2mm in diameter macroscopically ; when crushed and examined microscopically - narrow bacillary forms and elongate hyphae are seen with occasional branching.

Actinomycosis is a chronic disease producing marked fibrotic reaction, and it is difficult to obtain marked drug levels where required, so that a quick response to treatment should not be expected[4].

The clinically palpable mass on TRUCUT biopsy showed collection of acute on chronic inflammatory cells and basophilic filamentous bacterial colonies showing splendore-hoeppli phenomenon - suggestive of Actinomycosis. Patient was treated with Injection Gentamicin 60mg Intravenous - Thrice daily for 10 days and Tablet Doxycycline 100mg - twice daily for 6 months.

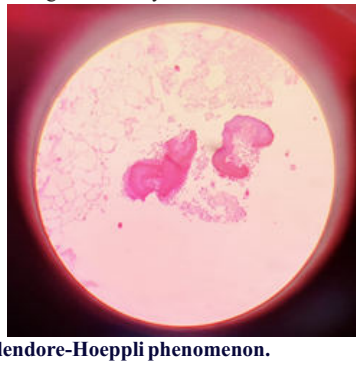

Figure 2 : Splendore-Hoeppli phenomenon.

CONCLUSION

The clinically palpable mass , initially thought to be a desmoid tumor , after thorough workup revealed an unusual diagnosis of Actinomycosis of the abdominal wall , therefore requiring a high index of suspicion. On treatment with prolonged course of tetracyclines and short parenteral course of Gentamicin ,as described above , patient showed signs of improvement , with resultant decrease in discharge , pain and eventual closure of sinus tract.

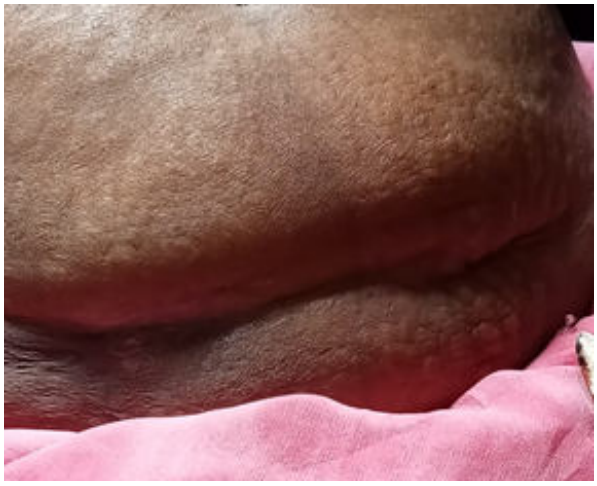

Figure 3 : Patient 3 months into treatment. Note the closure of sinus.

REFERENCES

1. Wong VK, Turmezei TD, Weston VC. Actinomycosis. *BMJ* 2011;Oct 11;343:d6099.
2. Brown JR. Human Actinomycosis. A study of 181 subjects. *Hum Pathol* 1973;4:319-30.
3. Lippes J. Pelvic actinomycosis: a review and preliminary look at prevalence. Am J Obstet Gynecol 1999;180:265–9.
4. Schlech WF, Gelfand M, Alper B, et al. Medical management of visceral actinomycosis. South Med J 1983;76:921–2.