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Case Report

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TUBERCULOSIS OF THE BREAST

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Summary

Tuberculosis is a chronic infectious disease that can involve almost any organ in the human body, on the other hand breast tuberculosis is considered to be rare entity through out the world. In this study we describe five cases of breast tuberculosis; three in the year 1999 and two cases in the year 2000. The five cases had various mode of presentation and clinical course but all the cases showed the same histological findings, which confirm the diagnosis. Review of the literature throughout the world was carried out including cases in Iraq.

Introduction

TB of the breast is a rare extrapulmonary TB and is either occurs as a separate entity or associated with pulmonary TB[1]. The diagnosis of this condition usually presents a problem to the treating physician or surgeon and in most of the cases it is diagnosed as carcinoma of the breast.

During the last decade the incidence of TB in our country, as well as all over the world, showed a sharp rise involving both pulmonary and extrapulmonary TB, [2], and our country suffer an additional burden to add to the causes of increase incidence and that is the unjustified economical sanction.

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With the upraise in the incidence of TB in general, the expected appearance of TB in unusual body organs like the breast of female patients.

During this decade TB has been diagnosed in many organs all over the body and out of that we report the following five cases of breast TB in Basra city.

Case No 1

21-year-old, married lady from city center presented with multiple discharging sinuses in the right breast of one month duration, associated with fever, anorexia and weight loss.

On examination there was single tender swelling in the right breast with multiple discharging sinuses, examination of the right axilla reveals two tender lymph nodes.

Chest X- ray done and it was normal.

Fine needle aspiration of the mass done which reveals characteristic caseating granuluma.

Treatment with anti -TB given for six months with dramatic response and closure of all sinuses without any residue and no recurrence.

Case No 2

A32 year old housewife presented with cough and expectoration, fever and night sweat for about forty days.

She also felt right breast mass.

On examination of the right breast there was hard tender swelling associated with nipple retraction and three hard tender lymph nodes in the right axilla.

Sputum examination for AFB was positive in three successive samples and CXR examination showed right apical TB lesion.

Fine needle aspiration of the mass done and showed; diffuse chronic inflammation with marked plasma and giant cell infiltration, and epithelioid granuloma.

Treatment started on anti TB drugs for six months which resulted in dramatic response of both pulmonary and breast lesion.

Case No 3

Multiparous women 45 years old lady; presented with painless right breast swelling of few weeks duration.

On examination the breast mass was about 6X3 cm not tender, with nipple discharge and retraction, no axillary lymph nodes. CXR done and was normal.

Excisional biopsy of the mass was done and histopathological examination showed caseating epithilioid granuloma with large number of giant cells.

Treatment started (four drugs) which resulted in clearance of the mass within three months of treatment.

There was no recurrence after six months of treatment.

Case No 4

A 19-year-old single female presented with chronic abscess of the right breast for seven months, with discharging sinus, no response to different antibiotic and repeated surgical drainage.

There were no constitutional symptoms.

Examination of the axilla showed no lymph nodes enlargement.

CXR done and was normal.

Excision of the sinus and the underlying abscess done. Histopathology reveals chronic inflammatory cell infiltration and multiple epithelioid granuloma with langerhans giant cells.

Sinus closed successfully within three months of treatment with anti TB drugs.

Case No 5

A 33 years old farmer housewife presented with painful mass in the left breast for three weeks duration.

She had a family history of pulmonary TB.

Examination of the breast showed tender swelling 4.5 X 2-cm size and axillary examination revealed 2 discrete painless lymph nodes .CXR done and was clear.

Excisional biopsy of one axillary lymph node revealed caseating granuloma. Treatment with anti TB started which resulted in complete clearance of the breast mass and the axillary node.

The following table gives summary of the five cases:

Case	Age	Duration	Signs	PTB	Diagnosis
I	21y	4/ 52	Rt.B. Sinus	-ve	FNA
II	32y	6/ 52	Rt.B. Mass+L.N	+ve	FNA
III	45y	6/52	Rt.B. Mass	-ve	Exc.biops
IV	19y	7/52	Rt.B.Absc	-ve	Exc.biops
V	33y	3/52	Lt.B. Mass+LN	-ve	LN biops

FNA= Fine Needle Aspiration, B = Breast, Rt=Right, Lt=Left, Exc=Exciscion , LN= lymph nodes .

Discussion

TB of the breast was first reported by Astley in 1892 when he described scrofulous swelling in the bosoms of young women most of whom suffered from TB cervical adenitis[1].

TB of the breast is still relatively rare even in endemic areas and even after the latest pandemic of the disease [1,7], in our study we find that TB breast constitute about 0.2 % of all extrapulmonary TB in Basra.

The diagnosis of TB breast in our study rest on the clinical suspicion of the breast swelling or sinus supported by both bacteriological and histological examination of material obtained by surgical excision or by fine needle aspiration[2].

When TB afflict the breast a granulomatous mass formed followed by caseation, if diagnosis and treatment not applied at this stage then caseous material will break through the skin leading to chronic discharging sinus formation[3].

The provisional diagnosis in all the cases was carcinoma of the breast, but careful history taking especially of fever, anorexia and the family history of TB should alert the treating doctor to the possibility of TB breast[4].

The presence of a sinus or sinuses should make the diagnosis most likely [5].

The age range in our cases is 19-45 years is relatively younger compared to cases in other part of the world[4, 7, 8].

Literature reviews done covering the last ten years; again reflect the fact that the disease is relatively rare.

In 1990 two cases reported from USSR[6].

In 1996 one case reported from FRANCE [7], and six cases reported from Saudi Arabia out of 1152(0.005%) mammography performed over long time[8].

In 1997 one case of male breast TB reported from India[9], and one case from Spain[10].

In 1998 three cases reported from Russia[11], and one case from India[12], and one case from France[13].

In Iraq report of three cases of TB breast in 1990, one of the three cases was male and one female patient with bilateral breast involvement, all the cases seem to be treated surgically followed by drug treatment[5].

In our cases the diagnosis was reached by either FNA (2 cases), or by biopsy (3 cases), and all the cases were treated by medical treatment with excellent result.

Conclusion

- TB breast is rare but should be thought about in the presence of breast swelling or sinus.
- Diagnosis can be reached rarely by bacteriological, but more likely by histopathological examination of material obtained.
- Family history or past history of PTB should alert the treating doctor to the possibility of TB breast.
- Treatment should be primarily by anti TB medications, surgery is only needed to obtain material for diagnosis.

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