



Full Length Case Report

A CASE REPORT OF BUBO – STD OR NON STD

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ABSTRACT

Bubo caused by several venereal and non venereal diseases. An enlarged inflamed lymph gland or node usually in the groin, may be suppurative or non suppurative. The non venereal causes are infective, pyogenic, glandular fever, malignancies or secondary to balanoposthitis, urethritis etc. Thus a case due to secondary infection of scabies is presented.

Key words:

Bubo,
Chancroid,
Scabies

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INTRODUCTION

In early days, Hippocrates identified and observed certain genital ulcers are accomplished by swellings in the groin (Kampmeier, 1982; Viravan *et al.*, 1996). Inguinal and femoral buboes are localised enlargements of the lymph nodes in the groin area, which are painful and may be fluctuant. They are frequently associated with lymphogranuloma venereum and chancroid. In many cases of chancroid an associated genital ulcer is visible, but occasionally may not be. Non-sexually transmitted local and systemic infections (e.g. infections of the lower limb) can also cause swelling of inguinal lymph nodes (Sturm *et al.*, 2005). An inflammatory swelling of a lymph node especially in the area of the groin (Bubon means groin) often with the formation of pus may or may not have pain is called bubo (Viraven *et al.*, 1996). Lump in the groin may be glandular or non glandular like hernias, ectopic testis, encysted hydrocele, saphenous varix and arterial aneurysm (Jenkins and O'Dwyer, 2008; Wang, 2012).

The glandular causes are malignancy, glandular fever (Hsu *et al.*, 2013), syphilis (Behets *et al.*, 1999), lymphogranuloma venereum (Kroop and Wong, 2005), chancroid (Kumar *et al.*, 1991), secondary to pyogenic anogenital infections (Ross, 2001) and secondary to balanoposthitis, urethritis, vulvitis and vaginitis.

Case report

A 25 year old unmarried male construction worker attended Dermatology, Venerology and Leprology (DVL) clinic with the complaints of painful swelling in the left groin for 8 day duration. On examination, he was very sick, unable to walk because of pain in groin swelling. The inguinal lymph nodes on the left side were enlarged, tender and matted, where the skin over the swelling is erythematous, shiny and thinned out, the right side lymph nodes are palpable. On further examination, healing papular lesions were present over both the thighs and genitals, multiple erythematous papular eruptions were present over the web spaces of both hands and umbilicus. In this stage, the patient was hospitalized. The next day morning of hospitalization, the bubo ruptured and the

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ulcer was formed at the size of 6cms X 3 cms with sloping edge. On laboratory examination, the serology for VDRL and HIV showed non reactive. Then the patient was administered with Ciprofloxacin and analgesics. The ulcer was healing but response was very slow. For Microbiological investigation, the discharge from the ulcer was sent for culturing and sensitivity where Gram's staining showed occasional pus cells and few gram positive cocci in pairs and single observed. Acid fast staining for tubercle bacilli showed negative. The culture and sensitivity supported *Staphylococcus aureus* where it was sensitive to ampicillin, cefotaxime, ceftriazone and doxycycline; resistant to erythromycin, ciprofloxacin and amikacin. After the Microbiological results, the treatment with ciprofloxacin stopped and doxycycline 100mg for 10 days was given; the healing response was faster and all the ulcers got healed and the patient was dehospitalized.

DISCUSSION

The inguinal syndrome is characterized by a transient genital ulcer followed by inguinal buboes - swollen lymphnodes (Linda and Hugh, 2005). Bubo is the commonest complication that follows primary lesion in few days to several weeks. It is usually unilateral. In general, in these type of cases, the nodes become enlarged and tender, further matted together. Suppuration may occur that form a unilocular abscess. In general, the skin over the swelling is thin, erythematous and shiny. The abscess ruptures through the skin forming a single sinus, later breaks down to chancroidal ulceration. Although the inguinal suppuration may complicate several other diseases including infections of the leg, cat scratch disease, tuberculosis and plague (Viravan *et al.*, 1996). Commonly, the gram staining of bubo aspirates proved to be insensitive and was not helpful in diagnosis further culturing and sensitivity may help much. The low proportion of genital ulcers associated with positive microbiological diagnoses also may be a result of the common use of antibiotics, as well as the asynchrony of ulcer and bubo development.

Studies that focus primarily on genital ulcers tend to miss this temporal dissociation. Furthermore, over one half of the patients had no history or evidence of genital ulceration, although small self healing ulcers may have gone unnoticed. Chancroid caused two-thirds of the bacteriologically confirmed infections and was 10 times more likely as a diagnosis if pus could be aspirated from the inguinal bubo. However, the overall good responses in the study to doxycycline, where the initial therapy with ciprofloxacin have slow residing ability (Linda and Hugh, 2005; Bauwens *et al.*, 1995). However, most of the studies in which these and other antibiotics have been used (third-generation cephalosporins, fluoroquinolones, or trimethoprim-sulfamethoxazole for buboes and ofloxacin or azithromycin for both infections) refer primarily to the treatment of such ulcers or to that of bacterial urethritis or anogenital infections. Relatively few studies have characterized the therapeutic response of buboes specifically (Rutanarugsa *et al.*, 1990; Knapp *et al.*, 1993; Ronald *et al.*, 1992).

Treatment considerations

- Aspiration of buboes through healthy adjacent skin may give symptomatic relief. However, incision/drainage or

excision of nodes is not helpful and may cause spread of ulcer (Mabey and Peeling, 2002).

- Serology is not an effective method for monitoring treatment response as the duration of antibody response has not been defined.
- Surgery may be required to repair genital/rectal damage of cases.
- Testing for chancroid and donovanosis (granuloma inguinale) should also be considered in patients, especially with travel to regions where these infections are endemic
- Hepatitis B immunization should be offered to non-immune patients.
- The opportunity to provide safer sex counseling should not be missed.
- The recommended treatment regimens (Kroop and Wong, 2005) are;

Antibiotic	Dosage	Indication	Comments
Doxycycline	100mg po BID for 21 days	Primary treatment	This should be used with extreme caution; contraindicated in pregnant women
Erythromycin	500mg po QID for 21 days	Alternative treatment	In pregnancy, it should be used for treatment
Azithromycin	1g po once weekly for 3 weeks	Alternate treatment	Although clinical data are lacking; some believe it is very effective.

Considering the risk of sexually transmitted diseases, the initial impression of chancroids was made to be the stay away from the home, financial freedom, alcoholism, sexually active age group, construction workers. In general ulcer is the commonest observation in bubo cases, but in our study the ulcer is absent. Most of the times, the primary lesion in the intraurethral region may not be visible; so, chancroid with bubo was the primary diagnosis. The patient denied history of exposure. On further examination, healing papular lesions was present over both thighs and genitals. Eliciting the history in depth, the patient gave the history of taking treatment for scabies. More information is needed on the efficacy of other antimicrobial agents as potential treatments for inguinal buboes caused by other pathogens. This case study emphasized the complete and thorough examination and eliciting the history for the treatment taken previously for the same illness.

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