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Case Report

SCABIES; SKIN INFECTION THAT AGGRAVATES PATIENT SUFFERING

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ABSTRACT

Scabies is a deleterious skin infection caused by a parasite named as *Sarcoptes scabiei*. Despite of availability of treatment, annually there are approximately 300 million cases of scabies worldwide. Infection becomes worse when scabies is accompanied by any other skin infection especially one involving abscess. An abscess is an inflamed lump that is filled by pus as a result of bacterial infection. Current case report is of prime importance for delivering information, to general community, regarding rare combination of these common diseases.

Keywords: Scabies, skin infection, patients suffering

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INTRODUCTION

Current case describes a highly contagious form of scabies that is accompanied with carbuncles. Scabies is a deleterious skin infection caused by a parasite named as *Sarcoptes scabiei*. This mite is of microscopic size and is commonly known as human itch mite. Scabies represent itself by itchy rashes, pus filled bumps and urticarial vesicles (infection in which skin becomes very itchy followed by red blisters).¹ Even though personnel hygiene plays a very important role, regardless of personnel hygiene, scabies can occur at any age even at high level of personnel hygiene. A carbuncle is a skin infection that occurs when many small furuncles (infection around hair follicle containing small amount of pus under the skin) join together to form a big lesion resulting in formation of lump deep inside the skin. The lesion so formed is filled with abscess and in most cases is accompanied by fever, malaise and itchiness. This type of infection is highly contagious i.e. it spreads to other parts of the body and also from person to person. Carbuncles can even bump into healthy individuals having good personnel hygiene.²

CASE PRESENTATION

A 14 year old male was presented to hospital with multiple swelling over right gluteal (buttock) and severe discharge of pus from left thigh. Patient complained of itchiness on hands. Brief physical examination of patient showed redness and blisters on hands as well as a 6 into 6 cm

carbuncle on left thigh that was associated with pus and bloody discharge. Prior history of patient showed that he had suffered from similar problem one month ago for which he had obtained treatment at a local clinic. There was no prior history of eczema. Patient complained of severe pruritus for past few days which become intense during night. Patient denied any history of insect bite, which might be a possible factor that can cause formation of carbuncles.

Immediately after admission to hospital, patient had undergone Incision and drainage (I & D) procedure. Culture and sensitivity test of aspirated pus showed staphylococcus aureus being causative agent of carbuncles. Blood test of patient showed high level of White blood cells (WBC's) and platelets which indicates severe infection.

DISCUSSION

Scabies is an extremely contagious skin infection. The causative agent of scabies i.e. *Sarcoptes scabiei* can't survive without a human host (maximum 3 days without host). Once mite is inside host it may survive up to a month. But symptoms of infection last for months or even years due to the fact that mite lays egg inside human skin, these eggs then develop into adult mites and so the infection continues.¹In current case, boy suffered from scabies that infected his hands. Condition worsens due to scratching of itchy carbuncles especially at night. Scabies infection become worse at night as the parasite feed on blood and reproduce during night when infected person's body is at rest in the absence of light.

Main goal of treatment is to resolve intense pain and itchiness followed by eradication of both infections. After drainage of pus, patient was prescribed intravenous tramadol to cope up with severe pain while benzoyl benzoate and intravenous cloxacillin were given for treatment of scabies and carbuncles respectively. Benzoyl benzoate emulsion is preferred treatment for treatment of scabies infestation.³It acts on central nervous system of mites after absorption and destroys them. Study shows that benzoyl benzoate shows better efficacy in treatment of scabies lesions as compare to sulphur ointment.⁴Additionally, recurrence of scabies is found to be less in patients treated with benzoyl benzoate. As culture sensitivity test and high level of WBC's indicate staphylococcal infection, therefore intravenous cloxacillin was administered to patient. *Staphylococcus aureus* shows high sensitivity rate (93%) towards cloxacillin.⁵ In addition to supportive skin care and intravenous antibiotics, fluid and electrolyte management was given to patient to ensure rapid recovery.

CONCLUSION:

Very often, scabies is confused with eczema and psoriasis. If scabies is not diagnosed at an early stage or if due to any reason diagnosis is delayed, it might lead to massive outbreak of scabies affecting both family members of patient and health care professionals in contact. Therefore, it is advised to contact healthcare professionals as soon as any sign of skin infection appears.

RECOMMENDATION:

Sound general health and good hygiene may help in preventing skin infections. As most skin infections are contagious, therefore care must be taken in order to avoid spreading of bacteria to those in contact. In case of scabies, infected person's clothing, bedding and towels should be

separated from rest of family members and must wash with hot water. As scabies worsen at night, therefore it is recommended to use treatment (creams, lotions) before going to bed. It is also advised to avoid vigorous exercise and hot showers, if you are suffering from scabies, as increase body temperature would exaggerate infection.

Additionally, prophylactic therapy is essential for all household members because of the fact that signs of scabies may not appear immediately after contact with causative agent.

REFERENCES

1. Pubmed Health. U.S National Library of Medicine. Carbuncle. Available at:<http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001828/> accessed 28 / 5/ 2012
2. Hengge UR, Currie BJ, Jager G, Lupi O, Schwartz RA. Scabies: a ubiquitous neglected skin disease. *Lancet Infect Dis*2006; 6: 769–779.
3. Karthikeyan K. Treatment of scabies: newer perspectives. *Postgrad Med J*2005; 81: 7–11
4. MayoClinic.benzylBenzoate (Topical Route).Available at:
<http://www.mayoclinic.com/health/drug-information/DR600229>
5. Motswaledi MH.Superficial skin infections and the use of topical and systemic antibiotics in general practice 2011;53(2):139-142.Available at:<http://www.ajol.info/index.php/safp/article/viewFile/66860/54861>