

Impetigo - A Case Report

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ABSTRACT

Impetigo is a skin infection caused mainly by streptococcus and staphylococcus group of bacteria. It involves mainly in children around the age of 2-6 yrs of age. Bullous and non bullous types are two forms of impetigo. Diagnosis is by swab and treatment is mainly through antibacterial ointments. This article is about a case of a 20 yr old female with a swelling in the upper lip and multiple vesicles in the lips, forehead and shoulder.

Key words: Impetigo, ecthyma, skin infection, bacterial infection.

INTRODUCTION

Impetigo is a common bacterial infection occurring in the superficial skin, especially on the face. When it spreads to deeper tissues, it is known as ecthyma^[1] or localized type of staphylococcus scalded skin syndrome (SSSS). It commonly occurs in the children around the age group of 2-6 years,^[2] but it can affect any age group.^[3] Most commonly occurs in the crowded areas with poor hygiene, day care centers and schools.^[4]

CASE REPORT

A 20 year old female patient reported to our department with a painless swelling in the upper lip for the past 1 year. She had a trauma 1 year back, following which she had a fracture in the upper front teeth. She remained asymptomatic for the next 6 months. Suddenly she developed a

swelling in the upper lip which was asymptomatic. She also developed crustations and multiple vesicles which ruptured spontaneously over the upper lip for the past 15 days. On examination, multiple vesicles were present in the forehead, vermilion zone of the upper lip and the shoulders with crustations and bleeding spots. Intraoral examination revealed Elli's class III fracture with an obliteration of labial vestibule. Intraoral periapical radiograph revealed an ill defined radiolucency in the apical 3rd of root of 11. The skin lesion present in the extraoral region was diagnosed as Impetigo. She was treated with topical Mupirocin 2 % ointment for one week. The lesions were healed completely after one week. After that root canal treatment was instituted for 11 and she was kept under observation for 6 months.



Fig 1: Facial asymmetry present is observed due to swelling involving the right upper lip and mild puffiness of the face
Fig 2: Diffuse swelling in the right upper lip with erythematous areas and crustations.



Fig 3, 4 & 5: Erythematous areas and crustations were present in the face, shoulders and flexor surface of the hands

DISCUSSION

Impetigo is caused by *staphylococcus aureus*, phage type 71 and group A beta-hemolytic streptococci pyogenes, a combination of the two, or less commonly, anaerobic bacteria. [5,6] Predisposing factors are skin lacerations, trauma, burns, insect bites, chickenpox poor hygiene, day care centers for toddlers, crowding, hot and humid climates, malnutrition and diabetes mellitus or other immunocompromised medical co morbidities. Autoinoculation via fingers, towels or clothing leads to formation of lesions in adjacent areas. [7]

Two clinical types of impetigo are bullous and non bullous (impetigo contagiosa). Bullous impetigo often affects children, as they lack specific immunity and have decreased ability to achieve renal clearance of the toxin produced by the causative organism. It appears as large, fragile bullae that ruptures and discharges yellow fluid. [8] These lesions are usually self limiting and heal without scarring. They

may present with fever, weakness and diarrhea occasionally.

Non bullous type is the most common presentation caused by *Staphylococcus aureus* or *Streptococcus pyogenes*. These lesions are often 2 cm in diameter and most frequently affect the face, around the mouth and nose. The trunk and limbs are also affected. It is usually localized and widespread type of non bullous impetigo is seen in the secondarily infected atopic eczema. [9]

The primary lesion is a thin walled vesicle on an erythematous base. It ruptures rapidly and the contents dry to form a brownish crust with a characteristic honey color. Sometimes there may be purulent discharge. [10] These crusts dry and disappear, leaving an area of erythema that heals without scarring. Autoinoculation may give rise to satellite lesions in the vicinity. Systemic signs like fever, weakness and regional lymphadenopathy will occur commonly. [11]

Diagnosis is mainly based on clinical features and treatment is done according to the results of skin swabs. Swabs are mostly taken in case of recurrent infections, during endemic outbreaks and when the etiology needs to be identified. It should be differentiated from Herpes simplex, chickenpox blister, bullous fixed drug eruptions, thermal or chemical burns. Lesions should be kept clean, washed with soap and warm water to remove secretions and crusts. [12] Antiseptics like Triclosan, chlorhexidine and povidone iodine are used. Topical antibiotics are effective in managing localised form of impetigo and the advantage of minimizing antibiotic resistance and avoiding the other adverse effects. Fusidic acid 2% ointment and Mupirocin 2% cream serves as a mainstay of treatment. Mupirocin ointment (Bactroban) is effective against MRSA; applied 3 times daily for 7-10 days. [13] Retapamulin 1% ointment is applied to the affected skin twice daily for 5days. [14]

Systemic antibiotics are considered only if the infection has deeper structure involvement and with other systemic signs like fever, lymphadenopathy, pharyngitis and / or numerous lesions. Broad spectrum antibiotics are selected as to cover bullous and non-bullous impetigo. Oral antibiotics like Flucloxacillin, erythromycin, clarithromycin, azithromycin can be given. It should be given for seven days. Amoxicillin - clavulanic acid can be used in case of penicillinase resistant cases. Clindamycin, trimethoprim, minocycline, tetracycline and fluoroquinolones are antibiotics of choice for MRSA. [9,15]

Avoid close contact with the infected person and touching the lesion with fingers. Always wash the hands after touching the area. Use separate towels, soaps and clothing until the infection

resolves. Frequent washing of the hands and also cut the nails to prevent scratching.

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