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# ERYSIPLEAS – DIAGNOSIS AND TREATMENT

ENT

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## ABSTRACT

Erysipleas is an infection involving the upper dermis and lymphatics. Milan's ear sign is a facial erythema spreading to pinna. Erysipelas over face spares the nasolabial fold because the nasolabial fold has no upper dermis and lymphatics while pinna has. There is one case reported of 52 year female with facial rednesss and swelling spreading to left ear with fever for four days. There laboratory tests do not show any specific findings except raised ESR. Patient was treated with oral antibiotics (amoxyclav) and anti-inflammatory (aceclofenac+paracetamol) resulting in complete recovery of the patient.

## KEYWORDS

Milan'ear sign, cellulitis, Relapsing polychondritis,

## INTRODUCTION

Erysipelas is defined as infection of superficial skin and lymphatics. It is a common infection that can occur anywhere in the body where superficial skin and lymphatics are present. Its differential diagnosis is cellulitis that involves the deeper dermis and subcutaneous fat. Milan's ear sign is facial redness extending to pinna.1,5 Pinna does not contain the deeper dermis and subcutaneous tissue and support the diagnosis of erysipleas. 1,2 This sign differentiates erysipleas from cellulitis.4 Erysipleas does not involve the nasolabial fold beacuse of absence of upper dermis and lymphatics.1 Group A beta hemolytic streptococcus, Streptococcus are the common organism causing it.2 Erysipelas is usually sensitive to penicillin G but also to Amoxicillin and macrolides.4 peniciilin or amoxiciilin are usually used as monotherapy in erysipleas.7,9

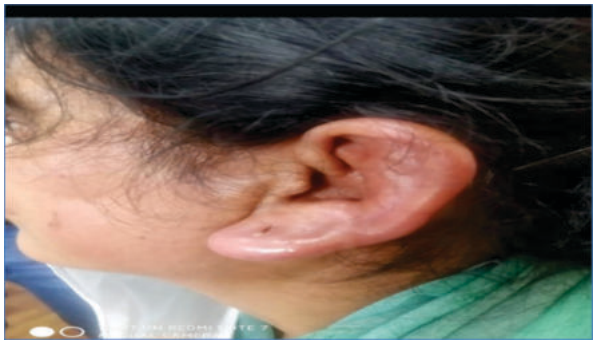
### Case Report

A 52 year old female patient came as out door patient in the department of otorhinolaryngology with the complaints of pain and swelling in the left pinna for the past four days associated with fever and generalized weakness. She had history of trauma to the sole of left foot with iron pin about ten days ago. She had no history of ear trauma, insect bite, ear discharge. She does not have history of diabetes mellitus, hypertension, bronchial asthma.

On physical examination she was well oriented to time,place,person. Her systemic examination was normal. On local examination of left pinna, there was reddish, shiny swelling extending to left side of face sparing the nasolabial fold. The external audiotary canal and tympanic membrane were normal. Her right ear examination was normal. Her facial nerve was intact.

The patient was advised complete hemogram with ESR, liver function test, renal function test, random blood sugar, serum lipid profile, echocardigraphy, chest x ray. All investigations were normal except her ESR was raised : 145mm 1st hour.

The patient was prescribed her orally amoxyclav 1gram twice a day for five days along with orally aceclofenac (100mg)+ paracetamol (325mg)combination twice a day for three days and then sos. Patient showed improvement after three days and complete recovery after five days.



## DISCUSSSION

The infection of upper dermis and lymphatics is callled erysipleas. The diagnostic feature of erysipleas is milan'ear sign. This sign is erthema over the face extending to external ear. This sign differentiates celllulitis of the face from erysipleas. There is usually unilateral involvement of ear but rarely bliateral involvement may oocur.5 Streptococci are the most common cause for it.Three species of streptococci are found: Streptococcus pyogenes (A) in 58–67%; S. agalactiae (B) in 3–9%; and S. dysgalactiae sp. equisimilis (C and G) in 14–25% of the patients. Other bacterias found are Staphylococcus aureus in 10–17%, and Pseudomonas aeruginosa and enterobacteria in 5–50% of the cases.3 The most commonly involved areas are leg (66%),followed by the arm(24%)and face (6%).9 The differential diagnosis of erythematous ear are relapsing polychondritis, ramsay hunt syndrome.5 Amoxicillin+clavulanic acid is mostly used as monotherapy in mild to moderate cases of Erysipleas while penicillin with clindamycin as combination therapy in severe cases.9 Erysipleas usually in the department of ent present as a limited disease. Patient presents with facial erythema extending to pinna. It commonly presents as unilateral swelling and redness over face. The diagnosis is usually clinical.

## CONCLUSION

Milan'ear sign helps in the early diagnosis of erysipleas. Patient presents usually as outdoor patient to the otorhinolaryngologist. It is mainly a clinical diagnosis. Usually there is breech in the skin somewhere in the body followed by erysipleas like ear trauma, accidental injury. These patients can be treated with oral amoxyclav in mild to moderate cases and with intravenous amoxyclav if not able to accept orally.

### Acknowledgment

We would like to thank the patient who had agreed to have her case reported.

### Declaration of patient consent

We certify that we have obtained the appropriate patient consent form. In the form the patient has given her consent for her images and other clinical information to be reported in the journal. The patient understands that her name and initials will not be published and due efforts will be made to conceal her identity, but anonymity cannot be guaranteed.

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### Conflicts of interest

There are no conflicts of interest.

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