INRODUCTION
Necrotising fasciitis (NF) is an uncommon soft tissue infection caused by toxin producing bacteria, characterised by widespread necrosis of subcutaneous fat and fascia with relative sparing of underlying muscle and is associated with severe systemic toxicity.1,2 It was first described by Hippocrates3 and later, was variously known as malignant ulcer, gangrenous ulcer, phagedena gangraenosa and hospital gangrene.4 The term necrotising fasciitis was first used in 1952 by Wilson.5 NF of the head and neck is rare. Etiology of periorbital involvement is usually trauma, eyelid infection or pruritis particularly caused by Streptococcus pyogenes and usually has a benign course.9,10

CASE PRESENTATION
A 60- year old male started with painful swelling and erythema of both eyes, was diagnosed as cellulitis by his general practitioner and was treated with parenteral ceftriaxone and gentamycin. However, his condition deteriorated within days; the swelling progressed with formation of supralesional bullae, ulcer, suppuration and appearance of black necrotic eschar at the borders of the affected area.

He presented to us after 7 days with swelling and necrosis of both the eyelids. Associated fever and general malaise was present. He had no history of trauma, sore throat, liver disease and was not immune-compromised. On examination, both the eyelids were edematous and necrotic with frank pus oozing from the affected site; severity in the left eye more than the right (Fig 1). There was no crepitus. Extraocular movementst were normal, visual acuity was 6/12 in right eye and 6/18 in left eye, conjunctiva was chemosed and rest of the anterior segment examination was normal. Fundus examination was normal. Swabs from the infected area revealed gram positive cocci and streptococcus pyogenes was isolated from the culture. Histology showed inflammatory debris, necrotic tissue and purulent exudates.

Total WBC count was 0.2x109/l haemoglobin 10 mg/dl, serum creatinine 1mg/dl, blood glucose 9.9 mg/dl. X-ray and CT scan of orbits were normal with no sinus and brain involvement. Patient was treated with parenteral cefazolin 1g, metronidazole 500mg and oral linezolid 600 mg based on the antibiotic sensitivity. Topical antibiotic eyedrops were also used.

Fig 1. Swelling and ulceration.

Fig 2. Marked resolution of swelling.
Debridement of the necrotic tissue was done until healthy viable tissue was seen and pus was drained. He showed dramatic improvement, his general condition improved, temperature fell, swelling decreased. Patient was discharged on oral amoxicillin and clavilunate and on final follow up after three weeks, the skin lesion had healed completely with well opposed eyelids and no lagophthalmos (Fig 2).

DISCUSSION
NF has been divided into three types on the basis of microbiological culture: Type I usually occurs after trauma or surgery and is polymicrobial due to Streptococcus, Staphylococcus aureus, vibrio vulnificus, pseudomonas and bacteroides fragilis. Type II describes monomicrobial infection due to group A Streptococci and Type III is clostridial myonecrosis is gas gangrene.

NF is difficult to identify in early stages. It begins as acute onset of a painful erythematous rash and after 4-5 days frank cutaneous gangrene develops and suppuration occurs by $8^{th}$ - $10^{th}$ day. The diagnosis is made on the clinical features. In the initial stages NF may be similar to preseptal cellulitis or erysipelas. Definitive diagnosis is made at surgery by demonstration of a lack of resistance of normally adherent fascia to blunt dissection. Our case too was initially treated as preseptal cellulitis. Wong et al developed the Laboratory Risk Indicator for NF (LRINEC) scoring system based on C-reactive protein (CRP), total WBC, haemoglobin, serum creatinine and blood glucose on admission. Culture of swabs may be helpful, as in our patient. Radiological studies, including plain X ray, CT, USG and MRI are more likely to detect gas within the soft tissues. The mainstay of treatment is rapid surgical debridement and broad spectrum intravenous antibiotics against gram positive, gram negative and anerobic bacteria such as penicillin, clindamycin, ceftazolin plus metronidazole combination.

While NF classically involves the trunk, groin and lower limbs, involvement of the eyelids though rare, is a well known entity. Periorcular NF has better prognosis as excellent blood supply in the eyelid area allows better access of systemic antibiotics and higher chance of avoiding necrosis and allows delayed debridement. However, potential outcomes do occur which range from cictricial lid retraction, lid malpositions, orbital involvement, ophthalmic and central retinal artery occlusion and loss of vision. In summary, NF is a rapidly progressive soft tissue infection which may result in high mortality rate, if treatment is delayed. Prompt surgical debridement may be necessary to ensure a satisfactory outcome.

REFERENCES