

A severe case of necrotizing fasciitis of the head, neck and mediastinum

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Introduction:

Necrotizing fasciitis (NF) is rare but potentially life threatening thus immediate diagnosis and intervention is required. NF is a rapidly spreading infection of the deeper layers of the skin, subcutaneous tissues with extension along fascial planes and subsequent necrosis. In most cases it is caused by group A streptococcus. The port of entry is often local.

Method:

A 50-year-old woman with recurrent eczema of the auditory canal consulted her GP because of a left auricular and preauricular erythema and a swelling of the left facial side. Initially diagnosed with an allergic reaction to an unknown substance she was put on anti-allergic medication. Symptoms worsened, the swelling spread over the eyelids and reached the mediastinal and thoracic region.

Results:

CT imaging showed (Fig. 1) inflammatory edema of the eyelids with extension to the cervical and mediastinal layers (Fig. 2). Intravenous antibiotic therapy was started followed immediate surgical by drainage. The patient developed a septic shock. Wound smears discovered beta-hemolytic streptococcus group A. Further necrotic tissue was debrided (Fig. 3) and the wounds were covered with split and full skin grafts (Fig. 4). 4 month later satisfying functional results were presented.

Conclusions:

Diagnosis is made by dinical appearance and confirmed by CT-scans, blood cultures and aspiration of secretion from tissue which often has "dish washing water" appearance. If not properly treated NF is deadly. Early symptoms can be masked by the use of corticoids. Treatment includes immediate surgical debridement of necrotic tissues to bleeding edges, wound drainage and antibiotics. Second and third time surgery might be necessary for further debridement and plastic reconstruction.



Figure 1: CT scan at the level of (A) ocular cavity, (B) supraglottis and (C) of the thoracic aperture.



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Figure 2: Localisation and extend of the facial (a and b) and thoracal (c) skin necroses.



Figure 3a and b: Intraoperative picture.



Figure 4a, b and c: Postoperative results after 4 months.

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