

Case	(112) Necrotizing soft-tissue infection: time is short!
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(112) Necrotizing soft-tissue infection: time is short!

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CASE PRESENTATION

A 46-year-old male with psoriasis consulted his GP due to severe pain in the left thoraco-abdominal wall, and was diagnosed with herpes zoster. Eight hours later, the patient presented to the emergency department of our hospital referring worsening pain and signs of shock.

Physical examination revealed erythema of the left flank and swelling of the left pectoral area. After the initial clinical evaluation, an abdominal perforation was suspected, and thoraco-abdominal multidetector computed tomography (MDCT) was performed.

The exam showed fluid in the superficial and intermuscular fascial layers greater than 4mm, with nonenhancement of the fascia, thickening of the majority of thoracic and abdominal wall muscles, and subcutaneous fat stranding. There was no evidence of gas in the soft tissues. These findings were in relation to nonspecific fasciitis, myositis and cellulitis, making it important to rule out a necrotizing soft tissue infection (NSTI).

Streptococcus pyogenes infection was confirmed. The patient was evaluated by surgery and underwent several operations. Daily follow-up with MDCT was performed, with the infection spreading to the left upper limb, and the soft tissues of the neck and head. In this case, radiological findings always preceded the apparition of clinical signs.

DISCUSSION

NSTI is a life-threatening soft tissue infection. There is much controversy in the literature regarding the use of imaging tests because they may be timeconsuming and result in a delay of urgent surgical interventions. However, radiological findings are useful to confirm the diagnosis, delineate the extent of the disease, and identify any acute complications. The main radiological findings are (1) :

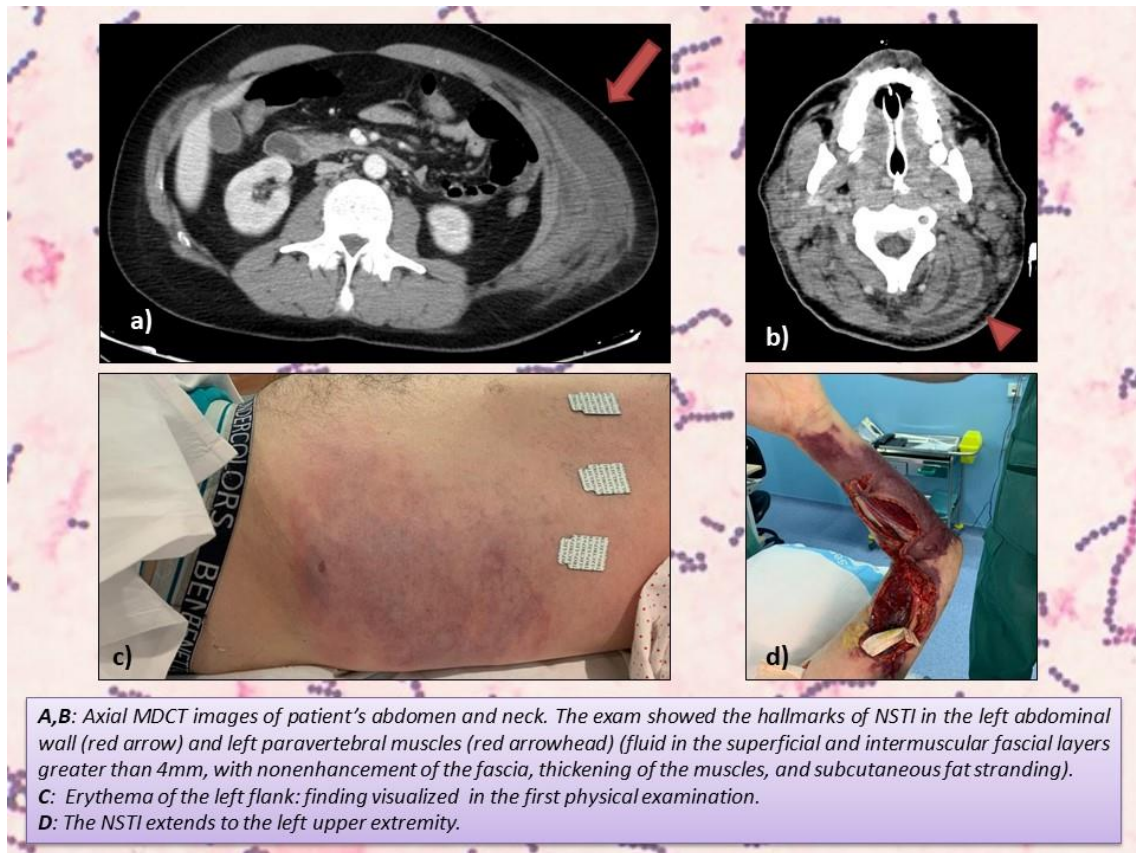
1. Fascial fluid > 4 mm in US and MDCT. This is the most frequent radiological finding.
2. Gas in the soft tissue. This is not always present.

If the radiologist confirms the diagnosis of NSTI, surgical consultation is mandatory; it is the surgeon who decides to perform immediate surgical debridement or other therapeutical interventions.

CONCLUSION

NSTI is a life-threatening soft tissue infection with a usually fulminant evolution, so treatment should be initiated without delay. Imaging tests are invaluable. They may confirm the diagnosis in cases where clinical signs are equivocal, they serve to establish the extent of the disease, and can identify any acute complications (2). As for NSTI, the role of the radiologist is to detect its typical findings in the radiological exams practiced and

thus allow other specialists to adopt early medical and surgical interventions that can save a patient's life.



BIBLIOGRAPHY

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