Introduction:
- Tropical pyomyositis is a rare infection of the skeletal muscle.
- Most frequently is caused by S. aureus, but MRSA is increasing in frequency.
- Symptoms are pain and swelling without erythema, increasing fever and then development of muscular abscesses.
- In temperate regions is more common in immunocompromised patients.

Case report:
- 50 years old male was admitted to Emergency Department for severe pain to lower limbs, hips and left forearm.
- Past medical history included bilateral hip prosthesis, due to a car accident, and previous left prosthesis infection.
- Initial workup: chest XR, blood test and culture showed increase in inflammatory markers. An abdomen CT showed splenomegaly and lymphadenopathies at the celiac trunk, hepatic hilum and external iliac vessels. Deep venous thrombosis was excluded.
- In the ED was treated with amoxicillin-clavulanate, iv crystalloids and analgesia.
- After 48h his condition deteriorated: he developed hypotension refractory to fluid resuscitation, worsening limb edema with increasing pain. Then he was admitted to ICU for noradrenaline support and invasive monitoring.
- Blood cultures resulted positive for methicillin sensitive S. Aureus and Piperacilline-Tazobactam was started.
- A transoesophageal echocardiogram showed no signs of endocarditis.
- A CT and PET of the limbs showed multiple muscular abscesses, so a bilateral fasciectomy was performed with clinical improvement.
- HIV and quantiferon came back negative, along with other tests in order to determine an underlying immunosuppressive state.
- The biopsy of a lateral cervical lymph node and subsequently a bone marrow biopsy showed a picture of chronic lymphocytic leukemia that was treated conservatively.

Conclusion & perspectives:
Fasciitis is a misleading diagnosis that should be guided by high clinical suspicion as at presentation signs and symptoms are few and non-specifics.
It is important to underline that a septic state from fasciitis can be rapidly evolving and close monitoring is required in order to highlight sudden haemodynamical and clinical worsening.
Finally how a multiple imaging (TC/PET/ultrasound) and invasive diagnostic approach were necessary to determine the underlying condition of chronic lymphocytic leukemia.