

“A Rare Case of Tropical Pyomyositis of the Iliopsoas Muscle in an Immunocompetent Young Man”

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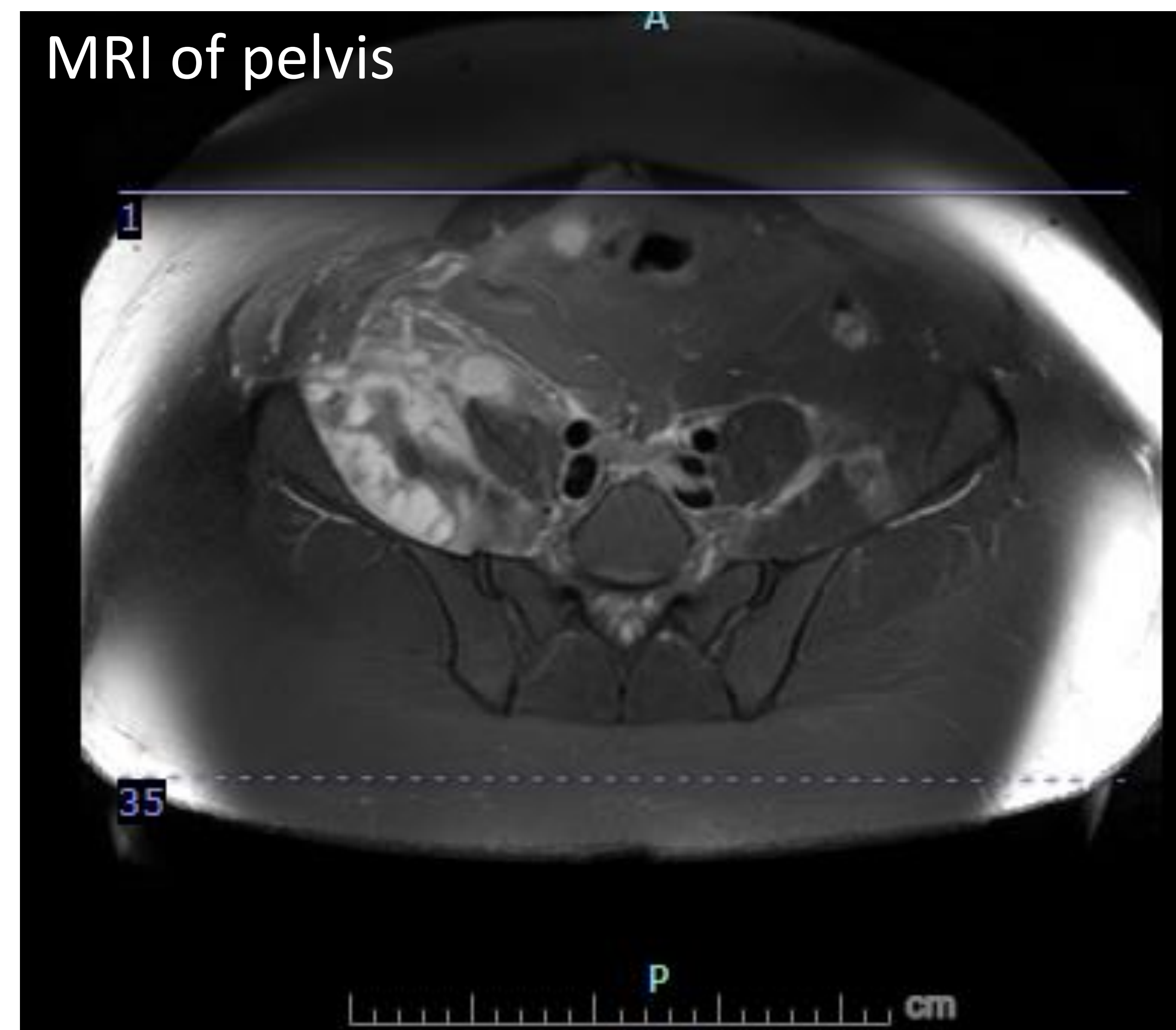
BACKGROUND

Tropical Pyomyositis or Myositis Tropicans, is a disease of the skeletal muscles often seen in tropical countries, characterized by cryptogenic abscess formation within the muscles. The exact pathogenesis of this disease is unknown, but it is proposed that pyomyositis is often a result of bacteremia seeding or translocation of bacteria from the skin to the deeper tissues because of trauma. In 20%–50% of cases there is a history of trauma to the affected muscles. While this disease is rarely encountered in the United States, a lack of familiarity with this condition could result in delayed diagnosis that could lead to serious complications. Our aim is to familiarize providers with this condition to promptly diagnose it and improve outcomes.

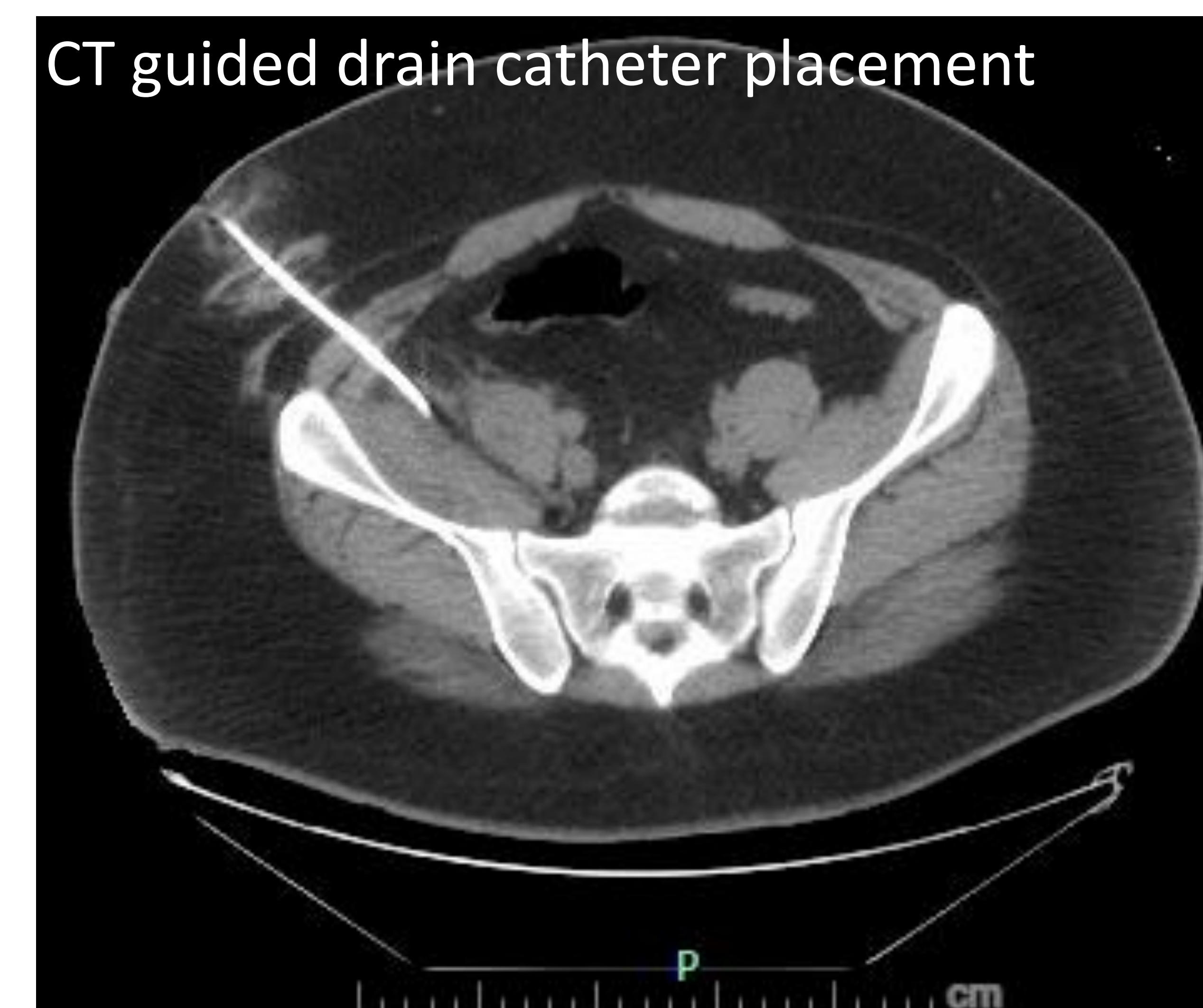
CASE SUMMARY

A 25-year-old Hispanic male previously healthy, without significant medical, surgical, or social history, presented with right groin pain that worsened progressively over several days after jumping off a truck tailgate. He also reported fever and excessive sweating. He denied any other associated symptoms, notably nausea, vomiting, abdominal pain, diarrhea, urinary symptoms, or skin rash. His initial workup at the Emergency Department, which included complete blood count, basic metabolic panel, blood cultures, urinalysis, creatine kinase (CK) and respiratory viral panel, was significant for leukocytosis of 21.46 k cells/ μ L with 84% neutrophils, elevated CK of 718 U/L. The rest of the workup was normal including HIV testing. An X-ray of the right hip was normal. An ultrasound of the right groin revealed a right psoas muscle non-specific avascular appearing mixed echogenicity. This led to ordering an MRI of the pelvis, which showed a large peripherally enhancing multilocular collection measuring 7.6 x 2.6 cm and extending up to 26 cm craniocaudal along the iliacus, psoas muscles, and into the right adductors, in favor of an abscess. The patient was started on piperacillin-tazobactam and linezolid. The surgery team was consulted and recommended drainage catheter placement. The patient underwent successful CT-guided right iliopsoas percutaneous drainage catheter placement by Interventional Radiology (IR). Serosanguineous fluid was evacuated, and a sample was sent for culture, which resulted in growth of Methicillin-Resistant *Staphylococcus aureus* (MRSA). The patient responded well to management with targeted antimicrobial therapy and drainage. He was discharged on oral linezolid with close follow-up in clinic as outpatient. Two weeks later, he was seen at the clinic, the drainage catheter output was non-significant. A repeat CT scan showed minimal amount of residual fluid within the distal iliopsoas muscle. The drain was successfully removed, linezolid stopped, and the infection resolved without any complications or sequelae. The diagnosis of Tropical Pyomyositis was retained given the spontaneous intramuscular abscess that occurred after a muscular traumatic injury because of jumping off a truck tailgate.

MRI of pelvis



CT guided drain catheter placement



DISCUSSION

Though primarily a disease of the Tropics, it is increasingly being reported from temperate regions, especially in immunocompromised patients. The bacteria most incriminated include *Staphylococcus aureus* (75-90%) and Group A streptococcus (1-5%); less common bacterial causes are Group B, C and G group *Streptococcus*, *Pneumococcus*, *Haemophilus* spp., and Gram-negative bacilli. In our case, jumping off a truck tailgate likely resulted in iliopsoas muscle tear and hematoma preparing a favorable environment for *Staphylococcus aureus* secondary seeding and proliferation resulting in abscess formation. Aggressive management, combining appropriate antibiotics along with surgical debridement and drainage of pus, is recommended. IR drainage is also a reasonable option for localized non complicated abscesses. Physicians should become more familiar with this potentially life threatening but curable infective disease entity since it could lead to progressive suppuration and serious complications if not properly managed.

REFERENCES

Chattopadhyay B, Mukhopadhyay M, Chatterjee A, Biswas PK, Chatterjee N, Debnath NB. Tropical pyomyositis. *N Am J Med Sci*. 2013 Oct;5(10):600-3. doi: 10.4103/1947-2714.120796. PMID: 24350072; PMCID: PMC3842701.