

Renal Cell Carcinoma with Malignant Pleural Effusion and Chest Wall Mass

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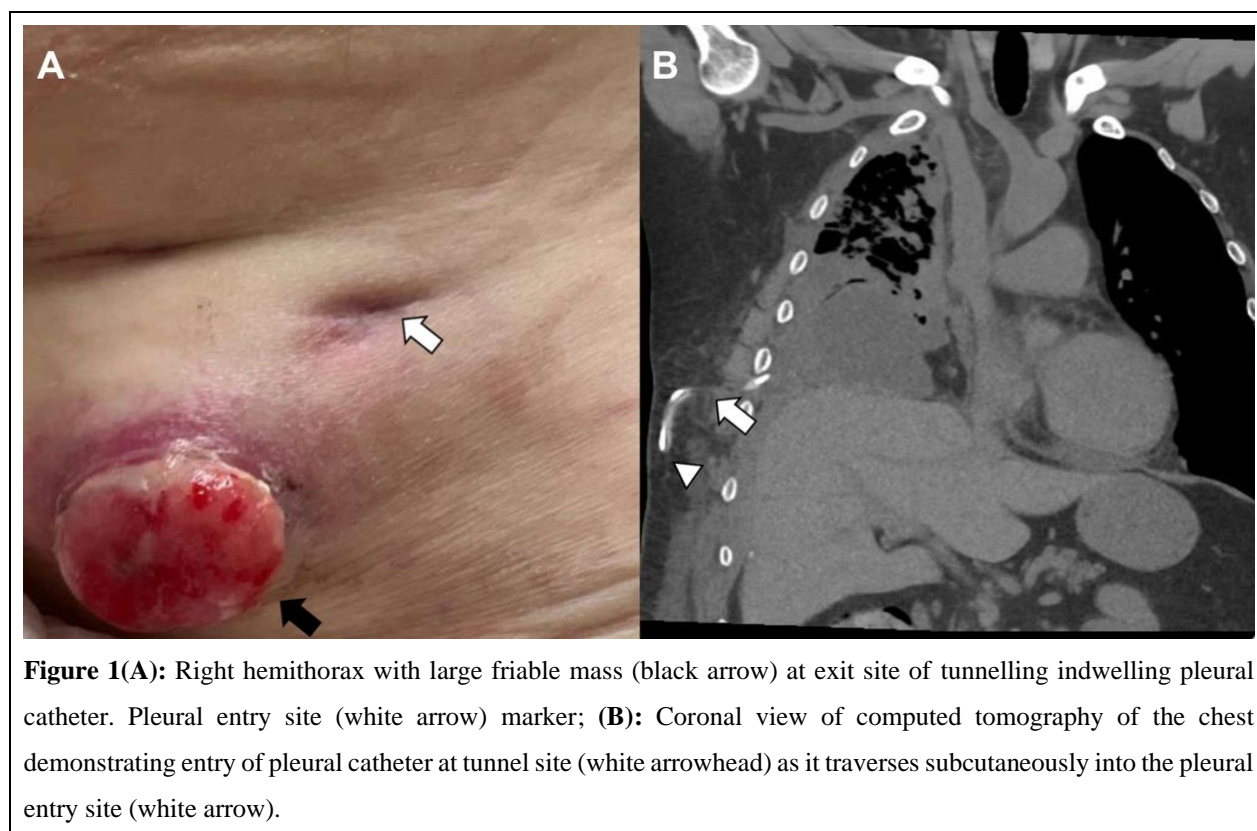
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Clinical Image

A 48 year old man presented to the Emergency Department with increased friable mass on right chest wall (Figure 1A). He had renal cell carcinoma metastatic to the lungs, pancreas and liver. He had received multiple lines of treatment for his cancer, and he declined additional therapies due to concern for toxicities. He had undergone tunneled indwelling pleural catheter (TIPC) placement to the right hemithorax 7 months prior at an outside facility, and the TIPC was removed 3 months prior to presentation.

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He denied any recent trauma, fever, or chills. The mass had slowly increased in size and was not painful, but oozing was noted. Physical examination revealed a non-tender friable mass on his right hemithorax (Figure 1).

TIPC are increasingly used to manage malignant pleural effusions [1]. The most feared complication is infection, however with patient education and placement in a sterile environment, the infection rate can be minimized to less than 5% [2]. Catheter tract metastasis may rarely occur with most tumors but mostly seen with mesothelioma [3]. They may occur during placement or removal of the TIPC.

In our patient, when the TIPC was removed, the catheter tract was greater than 5 cm, and the cuff was in the middle of the tract. Significant dissection was needed to remove the catheter. Physical exam showed 5 cm friable non-tender mass (Figure 1A) near the prior TIPC's exit site, and computed tomography of the chest (Figure 1B) prior to removal on the right lateral chest wall along the TIPC track. In those with significant pain, analgesia or radiation therapy can be considered. Seeding of the tract from malignant pleural effusion may occur at the time of intervention (placement or removal). Familiarity with TPC and their potential sequelae is important for health care providers.

Keywords: Malignant pleural effusion; Catheter tract metastasis; Tunneled indwelling pleural catheter

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