Aim: Intercostal lung herniation is a rare clinical condition defined as the protrusion of lung parenchyma beyond the anatomic boundaries of the thoracic wall. Acquired lung hernias are typically occur secondary to trauma or are associated with severe pulmonary disease. We present a case of lung herniation following DIEP breast reconstruction which is the first reported case to date.

Material and Methods: 40-year-old woman with a history of bilateral mastectomy for breast cancer and subsequent delayed, bilateral DIEP breast reconstruction. She returned to the emergency department four days after her reconstruction with chest pain, shortness of breath and swelling of her chest. CT angiography of her chest demonstrated a focal protrusion of her right lung into her anterior chest wall (Figure 1). Thoracic surgery was consulted for repair which was achieved with a patch technique using Allomax dermal matrix.

Results: We describe the first reported intercostal lung hernia following DIEP breast reconstruction reported in scientific literature. Our patient had no history of trauma, thoracic surgery or pulmonary disease which are considered the greatest risk factors for acquired intercostal lung herniation. Much like abdominal wall hernias, protrusion of tissue through a small defect places tissue at risk for ischemia. Early recognition is thus essential to avoid tissue loss.

Conclusions: Intercostal lung hernia is an uncommon clinical entity that has not previously been described as a complication of DIEP breast reconstruction. Its development is associated with significant morbidity including flap loss in this case. Early recognition of this rare complication is essential to avoid more severe sequelae of tissue ischemia.