

## Retained drain post joint replacement surgery and preventive measures, a case report.

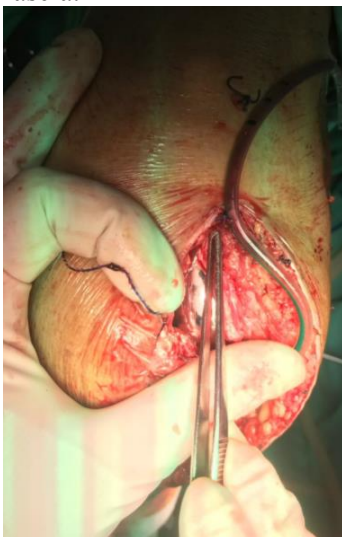
Wee Cheong Lim, Shaifuzain A R, Muhammad Rajaei A, Amran A S  
Department orthopedic, Hospital Universiti Sains Malaysia, Kelantan

### INTRODUCTION:

Surgical drains are tubes placed near surgical incisions in the post-operative patient, to remove pus, blood or other fluid, preventing it from accumulating in the body. Though a relatively rare event, retained surgical drain are preventable and lead to significant consequences. We reported a case report from our institution regards to retained surgical drain post joint replacement surgery.

### REPORT:

Mrs A, 58 years old, women. She was subjected to left total knee replacement at our center. Surgery was uneventful. Surgical drain was inserted prior to surgical wound closure. On postoperative day 3, the attempt to remove the drainage was met with great resistance and associated pain. The drainage could not be removed, with the feeling of the drainage tube being sutured to subcutaneous tissue. She was subjected to removal of drain. At the time of operation, the retained drain was sutured with fascia.



**Figure 1** shows the surgical drain was sutured with subcutaneous tissue, resulting in resistance and pain during the removal of drain tube.

### DISCUSSION:

There are several techniques were described by John at el <sup>(1)</sup> for prevention of retained surgical drains

Prevention technique:

1. Leave slack in the drain such that the black dot or marker is buried below the skin. Tuck the drain into lateral gutter for TKR. After closing, pull the slack out until the marker is at skin. If it glides easily, its is unlikely to be sutured in.
2. Pass the trocar, keeping the free end of the drain ling and protruding 2-3 cm from the distal end of wound. After fascia closure, pull the trocar end until the protruding end slides under the closed layer. Tethered drain gives resistance.
3. Place a hemostat on the dress end of drain. Once the layer above the drain is closed, use the sliding motion to and fro to evaluate for any resistance before proceeding with the closure.

### CONCLUSION:

Retained surgical drains are an avoidable and serious cause of postoperative morbidity. Surgeons should be aware of retained surgical drains as an iatrogenic cause of postoperative morbidity. Contemporary surgical practice should include methods to prevent, identify and manage retained drains and associated complications.

### REFERENCES:

1. Retained Surgical Drains in Orthopedics: Two Case Reports and a Review of the Literature, John S. Cox and Darin Friess, 2017