



ORTHO NEWSCAST



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Dear Doctor,
Greetings from Micro Labs. We are happy to bring you "Ortho Newscast" which contains latest and interesting news in the field of Orthopaedics.

This issue contains

- Recovery of anterior skin numbness post total knee arthroplasty in diabetic and nondiabetic patients.
- An Uncommon lipoma in Uncommon Location- A case report.
- Overlapping Orthopaedic Surgery- Is it feasible

Should you require any specific article or medical information, please feel free to contact us at medicalservices@microlabs.in

Looking forward to your valuable feedback

Best Regards,
Medical Team,
Micro Labs Limited



Recovery of anterior skin numbness post total knee arthroplasty in diabetic and nondiabetic patients.

After total knee replacement, skin numbness occurs from injury of the infrapatellar branch of saphenous nerve (IPBSN) and/or the anterior-inferior branch of the femoral cutaneous nerve (AIBFN) and may affect the patient outcomes.

Small number of studies demonstrated that the anterolateral skin incision had a significantly smaller area of skin numbness postoperatively between 6 weeks until one year compared to the anterior midline.

Aim of the study is to compare the prevalence of skin numbness between diabetic patients and non-diabetic patients undergoing TKA, numbness recovery time, to identify the association of proximally extended skin incision above upper pole patella and supero-lateral skin numbness.

Methods:

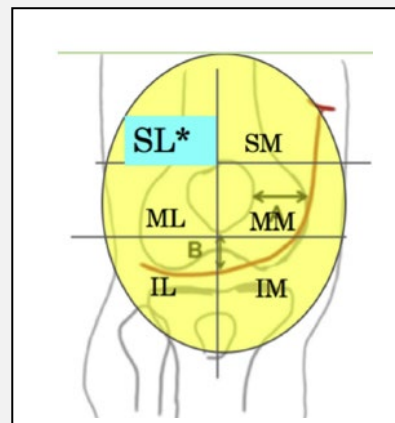
A prospective study of 120 patients who underwent TKAs were included in the study.

Patients with severe osteoarthritic (OA) of knee in a diabetic patient with numbness on the affected knee before undergoing TKA, poor controlled diabetes (hemoglobin A1C more than 7.0 mg per deciliter), and 3) patients with follow up less than 2 years were excluded from the study.

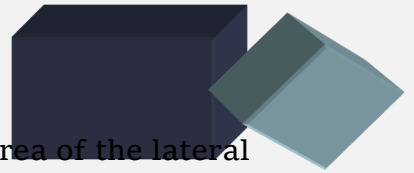
100 patients undergoing TKAs were recruited in this study. Patients were divided into 2 groups: 75 patients were in the primary OA knee without diabetes and 25 patients were in the primary OA knee with well controlled diabetes.

Standard parapatellar approach was routinely performed in all patients with total knee arthroplasty.

Skin numbness area was measured by Semmes Weinstein Monofilaments (10 g) on the affected knee postoperatively at 2 weeks, 6 weeks, 3 months, 6 months, 9 months, one year and at 2 years.



Anterior numbness defined as the numbness over the whole area of the lateral aspect of the skin. red line demonstrates the route of Infrapatellar branch of saphenous nerve.



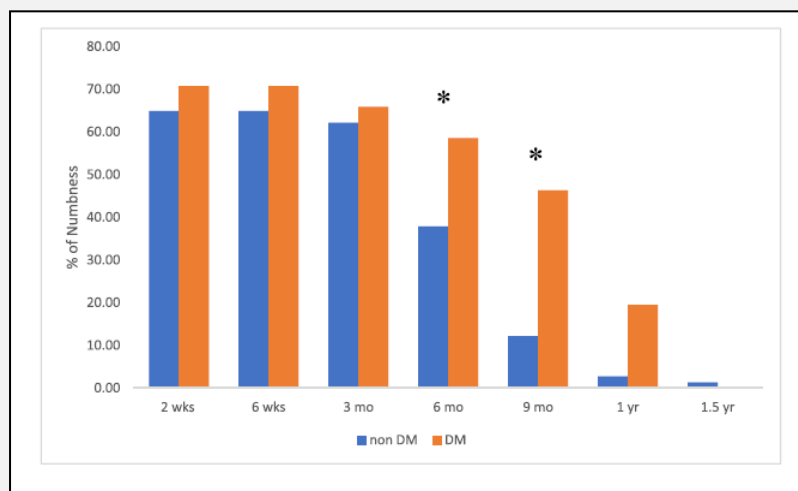
Results:

On examination Clinically, no difference in prevalence of skin numbness (73.2% vs 68.9%, $p = 0.36$) and warmth (97.6% vs 97.3%, $p = 1.00$) between diabetics and non-diabetics.

Area of numbness on an average was comparable.

But duration of

numbness recovery was significantly longer in diabetics (8.6 vs 5.3 months, $p=0.001$). Diabetics had a higher rate of global anterior numbness (48.3% vs 22.9%, $p=0.045$).



Prevalence of supero-lateral skin numbness (2.6%) correlated with the skin incision extended proximally above upper pole of patella at least 4.0 cm.

Discussion:

Total knee arthroplasty (TKA) is one of the most successful procedures and widely performed on patients who have late-stage knee osteoarthritis. However skin numbness from injury of the infrapatellar branch of the saphenous nerve (IPBSN) has been reported as a common complication related to TKA, which could affect patients' outcome.

Although the prevalence of skin numbness after TKA was comparable between diabetic and non-diabetic patients, the duration of numbness recovery was significantly longer in the diabetic group.

Prevalence and area of numbness decreased with time which has also been shown by few studies.

Current clinical study suggests that skin incisions greater than 4 cm above the upper pole of the patella should be avoided to minimize supero-lateral skin numbness.

Current study helped surgeons characterize the prevalence, and postoperative extent and duration of anterior knee numbness following TKA.

Reference:

Phruetthiphat OA et al. Anterior skin numbness after total knee arthroplasty: A prospective comparison study between diabetic and non-diabetic patients. J Orthop. 2020;22:12-16.

An Uncommon lipoma in Uncommon Location- A case report.

An Uncommon lipoma in Uncommon Location- A case report.

Lipomas is a soft tissue mesenchymal tumours. Spindle cell lipoma is a type of lipoma that presents 1.5% of total adipocyte tumors. The index and middle fingers were most commonly involved. It rarely involves thumb.

Here is a presentation of rare case of lipoma.

Case presentation:

A 55-year-old female presented with 18 months history of painless mass in the right thumb which increased gradually. In last two months, the mass started to bother daily activities and became a protruding mass.

No history of weight loss. Patient also reported a trauma to thumb two years ago. The clinical examination revealed a prominent mobile mass on the ulnar lateral aspect of the thumb with neither inflammatory changes nor a palpable pulse.

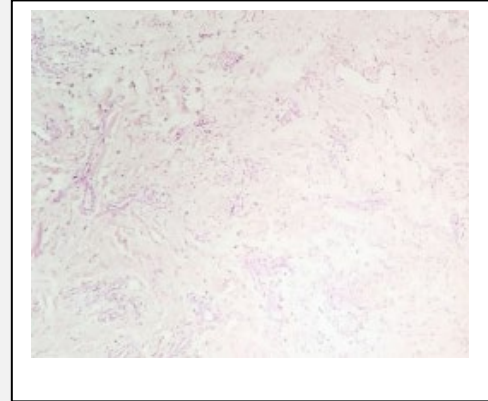
Passive mobility of the thumb was conserved. The neurovascular exam was normal. X ray of the digit was normal with no bone invasion.



Ultrasound revealed a well-uniform low-echo mass measuring $40 \times 25 \times 15$ mm on the ulnar lateral aspect of the thumb with no internal flow on Doppler, magnetic resonance imaging was not performed due to financial constraints.

After few days, the patient underwent surgery in which an excisional biopsy of the mass of the thumb was performed.

Postoperative events were uneventful. Histopathological analysis showed a spindle cell lipoma of the thumb.



Follow up of two years, the patient did not have recurrence of the tumor and no restricted motion of the thumb.

Discussion:

Lipomas presenting in the thumb is usually rare. Cause and pathogenesis of this tumor is still undetermined. A history of trauma was found in many cases. The differential diagnoses are well-differentiated sclerosing liposarcoma and the spindle cell liposarcoma. Spindle cell lipoma may be misdiagnosed with liposarcoma in this location as it appears also in this site. Clinically, most lipomas are asymptomatic.

Conclusion:

Lipomas of the digit are rare, need to be considered as possible etiology due to painful or mechanic restricted motion of the digit.

Reference:

1)Elghoul N et al. A Painless Restricted Motion of the Thumb: What Etiology? About An Uncommon Tumor in Uncommon Localization. Case Reports in Orthopedics. 2020; 5649204: 1- 3 pages.

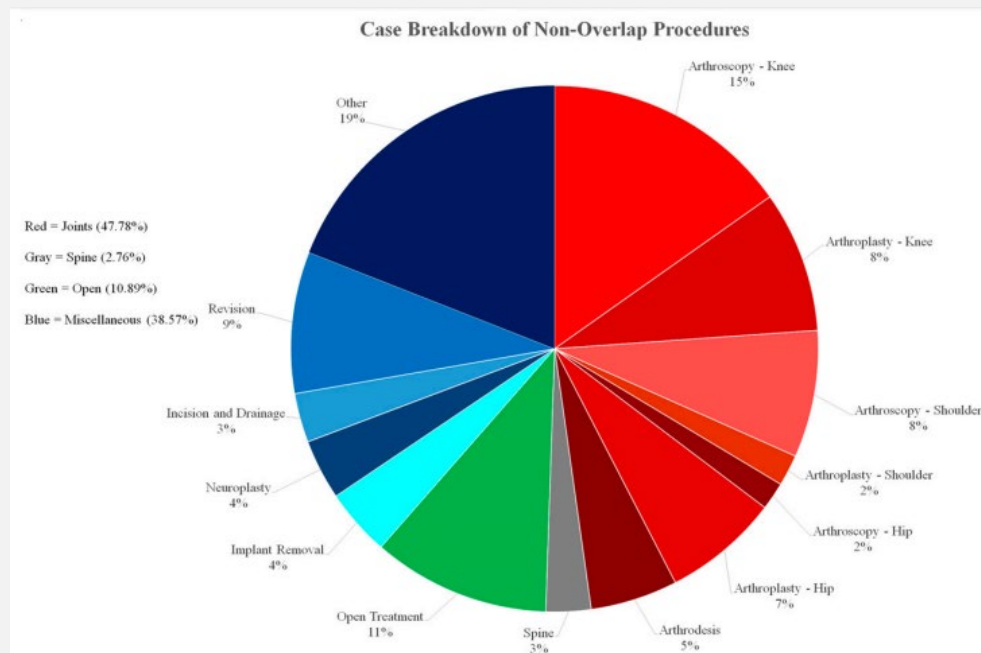
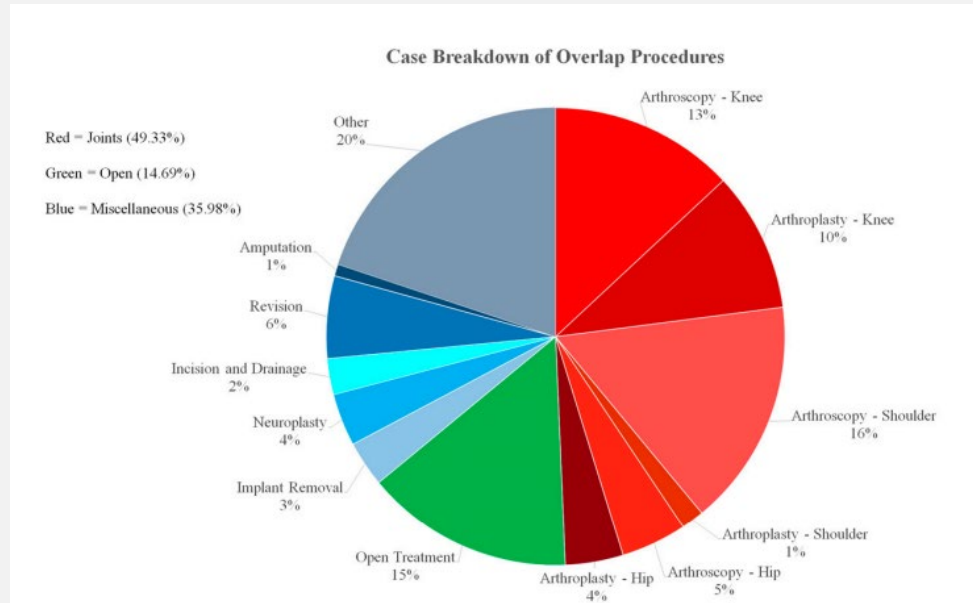
IN THE NEWS

Overlapping Orthopaedic Surgery- Is it feasible

Overlapping surgery refers to the practice of scheduling multiple procedures during which at least some portion of each procedure occurs at the same time.

The practice of overlapping surgery has been described as an acceptable practice when appropriately managed.

A study was done to assess whether overlapping surgery is associated with untoward outcomes for orthopaedic patients. Elective orthopaedic surgical interventions in 18,316 patients were assessed over 2 years.



Patients with surgical overlap had reduced mortality compared with controls during follow-up (1.8% and 2.6%, respectively; $p = 0.029$).

Patients with beginning and/or end overlap had a similar lack of association with serious unanticipated events; but patients with end overlap showed an

increased unexpected rate of return to the operating room after reoperation at 90 days (13.3% versus 9.7%; $p = 0.015$).

Overlapping surgery which was non concurrent was not associated with adverse outcomes in a large, matched orthopaedic surgery population.

Reference:

Glauser G et al. Assessment of Short-Term Patient Outcomes Following Overlapping Orthopaedic Surgery at a Large Academic Medical Center. J Bone Joint Surg Am. 2020;102(8):654-663.

