

HYBRID ENDOSCOPIC APPROACH FOR CUBITAL TUNNEL RELEASE AND ULNA NERVE TRANSPOSITION

Hanif K. , Raffael Ismail , Kamarul Arifin Khalid

Department of Orthopedic , Traumatology and Rehabilitation , Sultan Ahmad Shah Medical Center (SASMEC @ IIUM) , International Islamic University of Malaysia , Jalan Sultan Ahmad Shah , Bandar Indera Mahkota 25200 Kuantan Pahang.

INTRODUCTION:

The second most prevalent peripheral nerve entrapment syndrome in humans is cubital tunnel syndrome with an incidence of 18–25 per 100 000 individuals per year (Latinovic, R et al 2006). It may result in patients suffering a great deal of pain, incapacity, difficulty and in severe cases, the loss of hand function. Traditionally the cubital tunnel release was performed using open surgery , then came the marvel of endoscopic surgery

REPORT:

Presenting a case of a 46 years old gentleman , who was a right hand dominant patient . He was a teacher by profession and was an active smoker with underlying DM and HPT. Presented with tingling sensation over the right ring and little finger which worsen overtime. Furthermore patient also had worsening weakness and clumsiness which affected his daily activities. Examination revealed that patient had wasting of the hypothenar muscle , and the intrinsic muscle of the hand, ulna claw ,positive Froment test , Waterberg sign and elbow flexion test, with Tinel sign over the cubital tunnel. Clinical diagnosis of cubital tunnel syndrome was made .

Patient underwent for endoscopic cubital tunnel release with ulnar nerve transposition. Intraoperatively small skin incision measuring around 2cm was done along the surgical marking, and with deeper dissection until direct visualization of the ulna nerve. Then the endoscopic device was introduced through the same incision to perform the endoscopic release of cubital tunnel. Ulna nerve was examine under direct and endoscopic visualization and subcutaneous ulna nerve transposition was made.



Figure 1: Anatomical landmark and endoscopic release of the cubital tunnel

Endoscopic release is a safe and effective method surgical intervention . The skin incision is smaller, and soft tissue dissection is minimal, with a lower risk of neurovascular injury , and better cosmetic scar. Furthermore, the endoscopic method gives for a better view of the entrapment location without the need for substantial dissection.(Mirza, A. et al 2014). Endoscopic surgery carries more benefit and has fewer risks because short incisions and limited dissections reduce the danger of nerve injury.(Flore L. P. et al 2010).

CONCLUSION:

Hybrid endoscopic release of the cubital tunnel with the ulna nerve transposition are safe , carries less risk towards the patient , with better post surgical scar, can be perform during the same setting.

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