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A Case of Glomus Tumor of Finger: Differentially Diagnosed & Verified by Transillumination Test & MRI with Contrast within Shortest Time of Duration

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Abstract: ***Glomus tumor is a rare benign neoplasm, usually accounts for small percentage of hand tumors. It often differentially diagnosed with Raynaud. Phenomenon, Ulnar nerve entrapment, Local p yogenic abscess and R heumatoid arthritis. I present here a case of 43 year old female with 8 month history of pain in her left ring finger which was diagnosed as glomus tumor and was surgically removed and histological result was consistent with glomus tumor.***

Keywords: Glomus tumor, Transillumination test, MRI

1. Introduction

Glomus tumor is a rare benign neoplasm, first described by Masson in 1924. It arises from glomus body which is a specialised arteriovenous anastomosis surrounded by smooth muscle cells and large pale cuboidal cells known as glomus cells, the whole encompassed by a network of medulated and nonmedulated nerve fibrils. It is a thermo regulator, purple red in color, usually seen in 3rd to 5th deca6of age, although can occur at any age.

2. Case Report

A 43 year old female, presented with history of localized pain at tip of left ring finger for last 1 month of duration with signs of redness, pain and tiny swelling that mimics external manifestation of inflammation. No history of any preceding trauma, no history of increase temperature, no pallor, no skin ulcer. Then patient was initially treated with antibiotic agents. but after 2- 2.5 months again presented with same severity of localized pain at same position with additional complications of progressive pain along ulnar border of left hand that leads to misdiagnosed as having ulnar nerve entrapment and treated with anti neuralgic medication. Then she again came at 8th month after onset of disease with chief complain of feeling excruciating pain on exposure to cold that mimics R aynaud's phenomenon and also complain pain after pressure compression at this site with correlates with glomus tumor, , due to compression of the nerve fibrils by dilated glomus vessels. No history of fever or any rash or ulcer over this site.

On clinical examination, on Inspection: at the tip point of left ring finger there is a sharp localized point of tenderness.

No rise of temperature, a tiny red purple spot, no ulceration, patient is afebrile, no lymph node enlargement Systemic examination is normal.

On palpation: on minute touch patient experience excruciating pain.

Tinel's sign is negative

3. Diagnostic Investigation

Blood test: complete blood count, ESR, Aso tire, RA, CRP, ANA, Serum urea, Serum creatinine, Fasting blood sugar all are within normal limit.

X ray of left hand: PA & Lat view are normal USG of tip of left ring finger: normal Transillumination test: positive, show a localized lesion that indicates a propability of glomus tumor.

MRI of left ring finger: normal

MRI of left ring finger with contrast:
A tiny (1.4×1.2mm) enhancing lesion at tip of left ring finger on palmar aspect.= glomus tumor

Patient was referred to a general Surgeon for surgical excision of glomus tumor.

Patient none become fully asymptomatic following Surgery.

BIOPSY of this specimen show fi bromuscular tissue with a neoplasm composed of sheets and nets of round cell with uniform round neuclei around vascular channels which is consistent with the diagnosis of glomus tumor.

4. Discussion

Glomus tumor is a rare benign neoplasm. it accounts for only small proportion of hand tumors. This tumor mimics with clinical features of local pyogenic abscess at tip of finger nail, Raynaud's phenomenon, ulnar nerve entrapment, rheumatoid arthritis. The classical presentation of this disease are excruciating pain after exposure to cold and also compression pressure over this area and nit relived after any type of medication. This disease consist of very tiny lesion, usually that leads to misdiagnosed and also can’t be confirmed by X Ray, USG, even not on MRI also. Only diagnosed by transillumination test and MRI with contrast. Surgical removal only give complete cure. there us only low rate of recurrence.

5. Conclusion

This is to conclude that transillumination test is a simple, easiest test and MRI with contrast, a gold standard and confirmatory test of detecting glomus tumor of finger can be added to routine examination of finger lesions in importa8of keeping this tumor in mind among the possibilities of differential diagnosis of painful digital nodule.

References

[1] D. G. Waller and J. R. Dathan, “Raynaud's syndrome and carpal tunnel syndrome, ” Postgraduate Medical Journal, vol. 61, no. 712, pp. 161–162, 1985.View at: Google Scholar
[2] E. Di Poi, M. Bombardieri, R. Damato, E. Gremese, G. Valesini, and G. Ferraccioli, “Neurological involvement in systemic sclerosis evidence of a central Raynaud's phenomenon, ” Reumatismo, vol. 53, pp. 289–297, 2001.View at: Google Scholar
[3] D. Fahey, M. J. Utell, and J. J. Condemi, “Raynaud's phenomenon of the lung, ” American Journal of Medicine, vol. 76, no. 2, pp. 263–269, 1984.View at: Google Scholar
[4] Fornage B D. Glomus tumors in the fingers: diagnosis with US. Radiology 1988; 167: 183–185 [Google Scholar]
[5] Höglund M, Tordai P, Engkvist O. Ultrasonography for the diagnosis of soft tissue conditions in the hand. Scand J Plast Reconstr Surg Hand Surg 1991; 25: 225–231 [Taylor & Francis Online], [Google Scholar]
[6] Jablon M, Horowitz A, Bernstein D A. Magnetic resonance imaging of a glomus tumor of the finger tip. J Hand Surg 1990; 15A: 507–509 [Google Scholar]
[7] Johnson D L, Kuschner S H, Lane C S. Intraosseous glomus tumor of the phalanx: A case report. J Hand Surg 1993; 18A: 1026–1027 [Google Scholar]