Glomus tumour: A cause of intractable pain
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Abstract
Glomus tumour is not an unusual finding in common surgical practice. The condition is very painful as well as alarming. Due to the very location of the tumour it elicits excruciating pain during our day to day activities involving use of the fingers. That is why radical excision of the lesion is needed to get relief of such a painful ailments. We studied 8 cases both male and female over a period of 5 years. Proper diagnosis and operative treatment provided 100% cure rate.

Keywords
Glomus Tumour

Introduction
Glomus tumour is tumorous malformation of vasoformative tissue with involvement of the nerve. In a Glomus body there is neuromyoarterial apparatus which regulate peripheral blood flow in the digit, the continuous pain is not symptom but minor trauma to the affected site gives rise to sharp lancinating pain along the distribution of nerve.

Methods & materials
Eight cases of different age group were studied over a period of 5 years in private practices, ZH Sikder Woman's Medical Collage & Moulana Bhasani Medical College Hospital (MBMCH) from July 1998 to October 2003. Patients of different age groups were found starting form 20 years to 50 years. Four female patients were encountered & remaining were male. Thorough clinical examination was carried out including Love's pin test, which had a sensitivity of 100%. In all cases symptoms of pain typically originates in nail bed. One was found in toe nail bed (3rd toe) & remaining in finger nail beds. Tumor size were variable, less than a millimeter to a centimeter. All tumors became more prominent after nail avulsion. Following localization, total excision of the tumors circumferentially was done. Postoperative recovery was uneventful in all cases, with symptomatic relief. Histopathology was diagnostic except one, in which on Histopathology was done.

Observation & results are submitted in tabulated form

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<th>Table 1: Age distribution:</th>
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<tr>
<td>Age</td>
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<td>20-35</td>
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<td>36-50</td>
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<th>Table 2: Sex distribution:</th>
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<td>Name of sex</td>
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<tr>
<td>Male</td>
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Discussion
Glomus body is a neuromyoarterial apparatus, a controlled arteriovenous anastomosis or shunt between terminal vessels whose function is to regulate peripheral blood flow in the digits. Glomus tumour is tumorous malformation of Glomus body. These are paragangliomas, frequently involves nail bed with classic triad of pain, tenderness and cold sensitivity always happens while touching the nail. Patients complain of severe pain every time (he/she) touches the nail. Glomus tumour is a small form of smooth nodule rarely more than a mm in diameter present as an exquisitely tender red, violet or blue colored localized area beneath the nail. In our study most patients presented with severe excruciating pain along the wave of the involved nerve. Usually pain is disproportionate to the size of lesion. Pain usually starts following a minor trauma to the involved nail bed of fingers but in our study we found one of our cases involved the toenail. There are glomus tumours in other locations of body like glomus jugulare, Glomus tympanicum & Glomus vagale are vascular neoplasms arising form the jugular bulb and tympanic plexus respectively. Both tumors spread cephalically and posteriorly in to the middle ear and mastoid. Both are non chromaffin producing para ganglimias and histologically same as carotid body tumours. The glomus vagale is a neoplasm arising in the skull base & neck & may extend upwards into cranial vault. All these three varieties of tumors may slowly invade jugular foramen and its nerves like IX, X, XI, as well as VII,XII, & VIII cranial nerves in about 20% cases. The manifestations of middle ear cavity tumour are aviolaceous retro tympanic mass and conductive type of deafness. Brown's sign (Pulsation of the tympanic membrane that is inhibited by pneumatic otoscope), thin section high resolution CT scan combined with gadolinium enhanced MRI may delineate extent of tumour.

Mainstay of treatment is surgery. Excision of lesion gives the actual relief of the symptoms. In our study none of the patient experienced recurrence during post operative follows up.

We adopted through nail bed approach. Digital block was sufficient for anesthesia. With all aseptic precautions nail avulsion was done first, as a result the outline of lesion was clearer. The lesion was excused circumferentially. When the tumour is large and disrupts the nail matrix, a split thickness nail graft from another digit is needed to reconstruct the defect.

References
4. Baysal BE, van Schothorst EM, Farr JE:


