location of the nipple and can be implemented in the standard marking easily. It is an effortless method to avoid laterally placed nipples.

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Occipital Migraine: A Vascular Approach

Presenter: Edoardo Raposo, MD, PhD, FICS
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INTRODUCTION: Following the pioneering work of Guyuron et al. in 2001, an impressive body of literature demonstrated that the inflammation of peripheral nerves caused by chronic compression from surrounding structures (e.g., muscles, blood vessels) might trigger migraines.1 The currently adopted surgical procedure for the treatment of the occipital trigger site is performed under general anesthesia. An occipital scalp incision is followed by extensive undermining, sectioning of the occipital muscles, removal of a small portion of the semispinalis capitis muscle, and coverage of the great occipital nerves with a subcutaneous flap. In this study, we report our experience with a minimally invasive surgical procedure for occipital migraine headache treatment.2,3

METHODS: From June 2011 to September 2016, we operated on 42 patients with drug-resistant occipital tension-type or migraine headaches under local anesthesia. A 3 cm skin incision was performed at the superior nuchal line either unilaterally or bilaterally, depending on the patient’s symptoms. Thirty-two patients subsequently underwent selective multiple myotomies along with occipital artery ligation resulting in the decompression of the lesser and greater occipital nerves, and ten patients had occipital artery ligation only.

RESULTS: Mean follow-up time was 19 months (range: 3–63 months); 93.7% of patients had a positive response (85.5% of patients had complete symptom resolution; 8.2% reported a significant reduction in headache intensity, frequency, and duration; and 6.3% were refractory to surgery). Nevertheless, patients who had occipital artery ligation only had an 80% complete response rate, while significant improvement occurred in 20%. Temporary anesthesia was the main reported side effect and lasted for an average of 163 days. No serious early or late complications were observed.

CONCLUSION: Our findings confirmed data previously reported in the literature, both strengthening the evidence for a peripheral mechanism in migraine headaches and supporting Wolff’s vascular theory of migraine.4,5 Indeed, abnormal occipital arteries (exhibiting either ectasia or a coiling pattern) around the cited nerves were found during surgeries, the ligation of which resulted in migraine resolution. Our minimally-invasive procedure proved to be effective for the treatment of occipital migraine. Since no serious complications or side effects were observed, this procedure can be recommended to patients with severe forms of migraine and symptoms of drug dependency.

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Does Proximity of the Primary Tumour to the Lymph Node Basin, in Patients with Malignant Melanoma, Influence the Chance of Sentinel Node Positivity?

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**INTRODUCTION:** A retrospective study of melanoma patients looking at whether proximity of the primary skin tumour to the lymph node basin influences the chance of sentinel lymph node positivity.

**METHODS:** 600 patients undergoing sentinel node biopsy for malignant melanoma of upper or lower extremity, using the “10% rule”, were divided into those with a primary melanoma proximal or distal to the knee joint, (up to the ankle), and proximal and distal to the elbow (up to the wrist).

Clinical stage of disease which is known to be related to sentinel node positivity, is taken into account.

**RESULTS:** 600 patients treated for malignant melanoma of the extremities between January 2009 and March 2017 were included in the study. The age of the patients ranged from 24 to 94 years. The Breslow thickness ranged from 1 to 4 mm. The clinical staging ranged from 1A to 2B.

When broken down by anatomical site of the primary, 18 of the 88 patients (20.5%) with lesions on the arm were found to have positive lymph nodes compared to only 4 of the 31 patients (12.9%) with lesions on the forearm. Furthermore, 11 of 58 patients (19.0%) with lesions on the thigh were found to have positive lymph nodes, compared to only 19 of the 135 patients (14.0%) with lesions on the leg. The increase in rate of lymph node positivity when moving from distal to proximal along the limb, approached statistical significance (Z-score 1.4208, p=0.07). The stage of disease was taken into account and on comparison of proximal and distal sites, the stage of disease were comparable (Chi-squared test p=0.55.)

**CONCLUSION:** In patients with malignant melanoma involving the limbs, the proximity of the primary skin tumour to the lymph node basin may have influence on sentinel lymph node positivity.

A limitation of this study is the potential variability in the volume of dye injected may have an effect on the results.