P806 Comparison of the echogenicity of pigmented basal cell carcinoma with pigmented melanocytic nevus of head and neck using high frequency ultrasound imaging

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INTRODUCTION & OBJECTIVES: Since the appearance of pigmented melanocytic nevus (MN) and pigmented basal cell carcinoma (BCC) is similar in some cases, it is really important to differentiate them precisely. High frequency ultrasonography (HFUS) is a non-invasive method which has provided valuable information in different cutaneous lesions. The aim of this study was to compare the echogenicity of pigmented basal cell carcinoma with pigmented melanocytic nevus of head and neck using high frequency ultrasound imaging.

MATERIAL & METHODS: Thirty MN and 33 BCCs in the head and neck area were evaluated by using HFUS with 22- and 50-MHz hand-held transducers. The diagnosis of all lesions were later confirmed histopathologically. The echo-density was measured in the middle of the lesions as well as in the mid-dermis of the immediate surrounding normal skin.

RESULTS: Both BCC and MN were significantly less echogenic than surrounding normal skin (15.73 +/- 7.739 for BCC vs 29.55 +/- 14.425 for normal skin, $p < 0.05$; 12.67 +/- 6.845 for MN vs 28.80 +/- 11.746 for normal skin with 22-Mhz transducer, $p < 0.05$). By using the 22-MHz probe, the BCC lesions showed a higher density compared to MN (15.73 +/- 7.739 vs. 12.67+/- 6.845). The ratio of echo density of normal skin/lesion was 1.9890 for BCC and 2.3103 for MN ($p < 0.05$). Evaluation with 50-MHz transducer showed similar results.

CONCLUSIONS: Both BCC and MN are less echogenic than normal surrounding skin, but there was not any significant difference between them.