

TITLE: Predicting Malignancy in small lumps (<5cm)

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ABSTRACT:

Introduction and Aims: Standard guidelines suggest that most lumps less than 5cm will not be malignant. We aimed to identify any factors that can reliably predict those small lumps which will turn out to be malignant.

Method: A prospective database is maintained of all referrals to the “lumps and bumps” clinic at the Royal Orthopaedic Hospital, Birmingham. Data from this database, including size, symptoms, depth and diagnosis have been analysed to try and identify factors suggestive of malignancy.

Results: 325 patients were identified, with 57 (17.5%) malignant and 268 (82.5%) benign lumps. Size >3cm (35.8% vs 9.9% <3cm), increasing in size (23.6% vs 8.6%) and deep to the fascia (18.3% deep vs 15.6% sc) were found to be the factors most associated with malignancy. Pain was found to an unreliable predictor (15.5% vs 18.9% painless). Having any 1 of these features was found to give a 16.1% chance of malignancy, having any 2 a 58% chance, 3 a 87% chance and, if all 4 features were present, the chance the lump was malignant was 93.5%.

Discussion: This study is necessarily very skewed, as almost by definition patients were only referred if there was a possibility of malignancy considered. It does, however, serve as a useful indicator of possible warning signs that may be useful both for surgeons and GPs when assessing an unknown lump.