

Histological features

Twenty four patients (38.1%) were histologically confirmed to have malignant nodule. The remaining 39 had benign nodules (61.9%). The prevalence of malignancy was lower in small vs. large nodules (14.0% vs. 23.8%, $p < 0.05$). However, the benign histopathological finding were more common in large than in small nodules also but there is no significant difference (56.5% vs. 25.4% respectively, $p > 0.05$).

Ultrasound finding and histological features:

The relationships between ultrasound findings and histological features show that hypoechoic appearance was more common in histologically-confirmed malignant lesions than in benign nodules but without significant difference (54.2% vs. 53.8%)

calcifications were more common in histologically-confirmed malignant lesions than in benign nodules (70.8% vs. 38.7%; 0.13: $p < 0.05$; OR 2.1, 95% CI 1.8-2.3), as were blurred margins (66.7% vs. 41%; 0.42: $p < 0.05$; OR 7.1, 95%CI 6.6-7.6), and highly significant difference in central vascularity type 2 (62.5% vs. 25.6%; 0.007: $p < 0.01$; OR 3.2, 95% CI 3.1–3.4) in malignant lesion versus benign one (Figures 1-4).

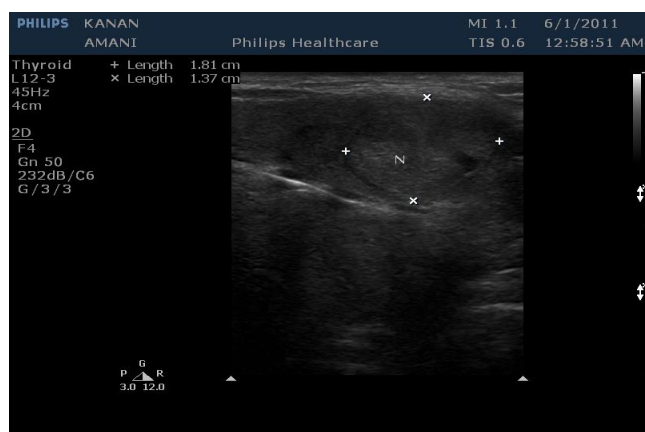


Figure 1. Longitudinal sonogram of a typical hypoechoic, well-defined, round lesion with a thyroid adenoma

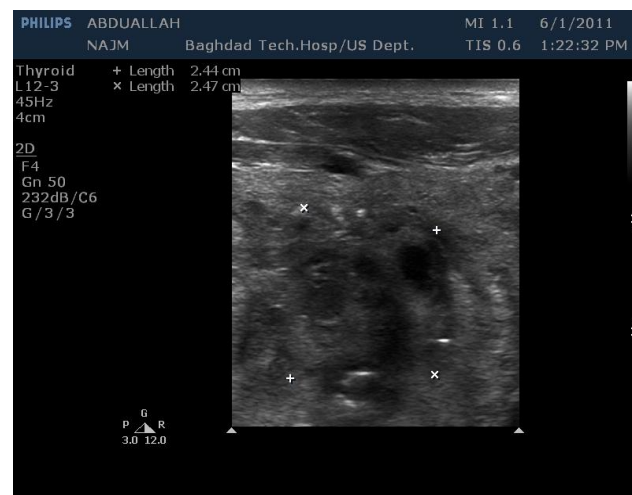


Figure 2. Longitudinal sonogram of a papillary carcinoma with coarse calcifications.

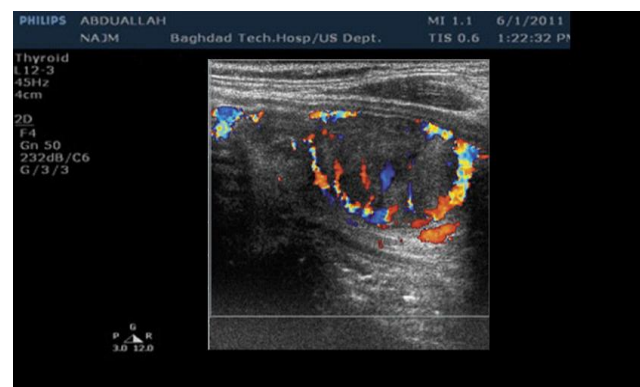


Figure 3. Showing peripheral vascularity in a thyroid nodule on Color Doppler

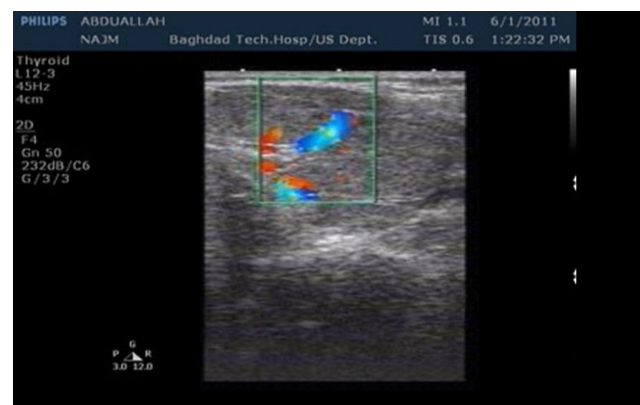


Figure 4. Showing central vascularity in a thyroid nodule on Color Doppler