Central/peripheral vascularization and resistance index at Doppler ultrasound examination of thyroid nodules. Are they useful to differentiate between benign and malignant pathology?

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INTRODUCTION
Thyroid Doppler ultrasound (TDUS) is highly used in the evaluation of thyroid nodules (TN)¹. Malignant thyroid pathology has been more frequently associated with central vascularization of such nodules. There is controversy regarding to the usefulness of the Resistance Index (RI) in the assessment of TN ²,³.

OBJECTIVE
Our aim was to analyze the utility of vascularization characteristics and RI at TDUS in the distinction of benign and malignant TN.

PATIENTS AND METHODS
Characteristics of peripheral vascularization (PV) or central and peripheral vascularization (C/PV), and RI (estimated by blood flow speed at the prominent artery at TDUS) were analyzed in all patients who underwent thyroid surgery and had an US-guided fine needle aspiration biopsy (FNAB) performed in our institution since June 2011 to November 2015.

RESULTS
In our experience, characteristics of vascularization (peripheral or central and peripheral) and the RI of TN at TDUS alone were not useful to distinguish between benign and malignant pathology in our population.

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CONCLUSION
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BIBLIOGRAPHY