



Imagens em Endocrinologia

Thyroid Fine Needle Aspiration Biopsy Complicated with Massive Bilateral Hematoma Under Clopidogrel


 Isabel Inácio ^{a,*}, Teresa Azevedo ^a, Joana Guimarães ^a
^a Endocrinology Department / Centro Hospitalar do Baixo Vouga, Aveiro, Portugal

INFORMAÇÃO SOBRE O ARTIGO

Historial do artigo:

Received/ Recebido: 2022-06-29

Accepted/Aceite: 2022-09-12

Publicado / Published: 2023-01-18

© Autor (es) (ou seu (s) empregador (es)) e Revista SPEDM 2022. Reutilização permitida de acordo com CC BY-NC. Nenhuma reutilização comercial.

© Author(s) (or their employer(s)) and SPEDM Journal 2022. Re-use permitted under CC BY-NC. No commercial re-use.

Keywords:

 Biopsy, Fine-Needle;
 Clopidogrel;
 Hematoma;
 Thyroid Gland.

Citologia Aspirativa por Agulha Fina da Tiróide Complicada com Hematoma Bilateral Maciço sob Clopidogrel

Palavras-chave:

 Citologia Aspirativa por Agulha Fina;
 Tiróide;
 Hematoma;
 Clopidogrel.

A 67-year-old woman with arterial hypertension and nontoxic multinodular goitre underwent ultrasound-guided fine-needle aspiration biopsy (FNAB) using a 25-gauge needle on the two nodules in the left lobe (two punctures on each nodule): an isoechogenic solid nodule with regular margins measuring 37.4x24x25 mm [European Thyroid Imaging and Reporting Data System (EU-TIRADS) 3¹] and a slightly hypoechogenic solid nodule with regular margins measuring 17.6x15x14 mm (EU-TIRADS 4¹). She had no previous history of bleeding and was recently being treated with clopidogrel without having reported it to endocrinologist. Thirty minutes later, the patient developed severe neck pain and dysphagia. The patient applied ice at the biopsy site and ultrasound evaluation showed a hematoma anterior to the thyroid, with larger volume on the right side (34.1x19.2x15.4 mm) than on the left (22.1x21.6x6.7 mm) (Fig. 1). The esophageal pathway was intact (Fig. 2). She kept surveillance at emergency department, with successful

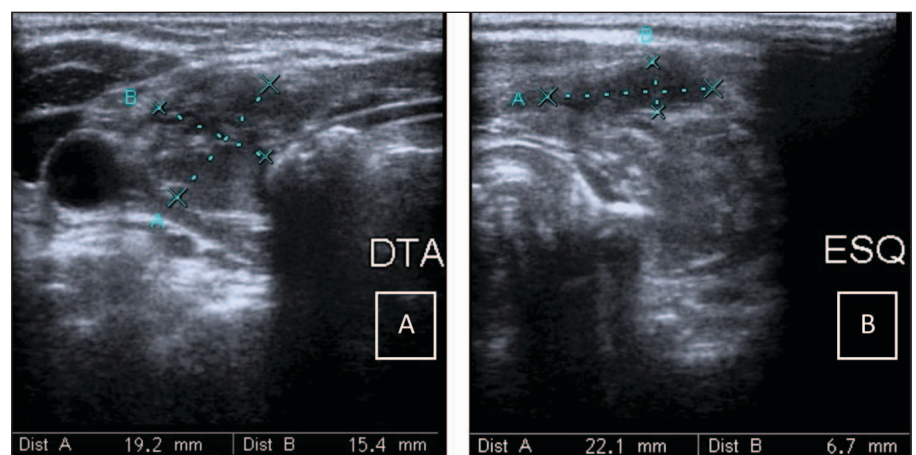


Figure 1. Ultrasound showed a bilateral thyroid hematoma anterior to the thyroid after fine-needle aspiration biopsy in a patient taking clopidogrel. Image A shows the hematoma on the right side and image B shows the hematoma on the left side.

* Autor Correspondente / Corresponding Author.
 E-Mail: isabelmrinacio@gmail.com (Isabel Inácio)
 Avenida Artur Ravara, 3810-501 Aveiro, Portugal

<https://doi.org/10.26497/ie220041>

1646-3439/© 2022 Sociedade Portuguesa de Endocrinologia, Diabetes e Metabolismo. Publicado por Sociedade Portuguesa de Endocrinologia, Diabetes e Metabolismo. Este é um artigo Open Access sob uma licença CC BY-NC (<https://creativecommons.org/licenses/by-nc/4.0/>).

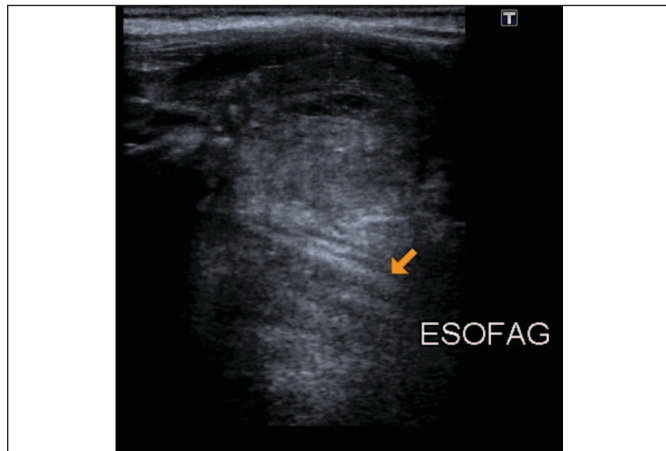


Figure 2. Ultrasound showed the esophageal pathway intact.

resolution of the hematoma. Complete blood count and coagulation tests showed no changes.

Ultrasound-guided thyroid FNAB is a safe procedure and antiplatelet drugs, such as clopidogrel, can be maintained.² Hematomas are the most common complications, but can be adequately treated with compression if the physician advises the patient.³ In this case, we can speculate that clopidogrel is only an extra risk factor and the hematoma occurred as a complication of the FNAB itself. Paradoxically, the largest hematoma volume was found on the side opposite the biopsy site, which could be explained by the effective application of compression and ice at the biopsy site. Reassessment thyroid ultrasound after FNAB is important in patients who develop symptoms such as severe pain or other sudden symptoms to detect serious complications early.

Contributorship Statement / Declaração de Contribuição:

II: conception, data collection, and draft manuscript preparation.
TA: conception and draft manuscript preparation.
All authors reviewed and approved the final version of the manuscript.

Responsabilidades Éticas

Conflitos de Interesse: Os autores declaram a inexistência de conflitos de interesse na realização do presente trabalho.

Fontes de Financiamento: Não existiram fontes externas de financiamento para a realização deste artigo.

Confidencialidade dos Dados: Os autores declaram ter seguido os protocolos da sua instituição acerca da publicação dos dados de doentes.

Consentimento: Consentimento do doente para publicação obtido.

Proveniência e Revisão por Pares: Não comissionado; revisão externa por pares.

Ethical Disclosures

Conflicts of Interest: The authors have no conflicts of interest to declare.

Financing Support: This work has not received any contribution, grant or scholarship.

Confidentiality of Data: The authors declare that they have followed the protocols of their work center on the publication of data from patients.

Patient Consent: Consent for publication was obtained.

Provenance and Peer Review: Not commissioned; externally peer reviewed.

References / Referências

1. Russ G, Bonnema SJ, Erdogan MF, Durante C, Ngu R, Leenhardt L. European Thyroid Association Guidelines for Ultrasound Malignancy Risk Stratification of Thyroid Nodules in Adults: The EU-TIRADS. *Eur Thyroid J* 2017;6:225-37. doi: 10.1159/000478927.
2. Khadra H, Kholmatov R, Monlezun D, Kandil E. Do anticoagulation medications increase the risk of haematoma in ultrasound-guided fine needle aspiration of thyroid lesions? *Cytopathology* 2018;29:565-8. doi: 10.1111/cyt.12608.
3. Polyzos SA, Anastasilakis AD. Clinical complications following thyroid fine-needle biopsy: a systematic review. *Clin Endocrinol.* 2009;71:157-65. doi: 10.1111/j.1365-2265.2009.03522.x.