

# **Cervical Squamous Cell Carcinoma versus Adenocarcinoma: Case Report with Diagnostic Discrepancies Between Cytology and Histology**

Domingues R<sup>1,2,3 # \*</sup>, Campos E<sup>1 #</sup>, Monteiro M<sup>4 #</sup>, Carvalho S<sup>1 #</sup>, Lopes C<sup>1,5,6</sup>

<https://doi.org/10.26537/citotech.vi9.6909>

<sup>1</sup>Escola Superior de Saúde, Instituto Politécnico do Porto, Porto, Portugal

<sup>2</sup>Serviço de Anatomia Patológica, Instituto Português de Oncologia de Coimbra Francisco Gentil - EPE, Coimbra, Portugal

<sup>3</sup>Laboratório de Citopatologia Dra. Odete Real, Coimbra, Portugal

<sup>4</sup>Serviço de Anatomia Patológica, Hospital de Cascais, Grupo Ribera, Lisboa, Portugal.

<sup>5</sup>Instituto de Ciências Biomédicas de Abel Salazar, Universidade do Porto, Porto, Portugal

<sup>6</sup>IMP Diagnostics, Porto, Portugal

Received: January 2025/ Published: December 2025

# These authors contributed equally to this work

## **\*Corresponding author:**

Rita Domingues

[anaritadomingues32@gmail.com](mailto:anaritadomingues32@gmail.com)

## **ABSTRACT**

Cervical cancer is one of the leading causes of death among women worldwide, with two predominant histological subtypes: squamous cell carcinoma and the adenocarcinoma.

This paper aims to address a case with a cytological diagnosis of adenocarcinoma that, following histological analysis, was classified as squamous cell carcinoma.

The cytological diagnosis was based on the presence of several three-dimensional cell groups with cells of glandular morphology at the periphery, pseudo stratification and occasionally appearing to form lumens. However, the histological examination revealed a neoplasia constituted by squamous cells extending into the glandular recesses. Complementary histochemical and immunohistochemical studies confirmed the squamous origin of the neoplasm.

A review of the cytological slide, performed after the histological diagnosis, allowed the identification of cellular aggregates composed of cells with dense cytoplasm and angular borders, with hyperchromatic nuclei and marked pleomorphism, findings consistent with the histological diagnosis of squamous cell carcinoma.

This study highlights the importance of cytology in the early detection of cervical neoplasms, as well as the relevance of cyto-histological correlation and ancillary diagnostic techniques for the accurate characterization of cervical neoplasms.

**Key-words:** Cervical cancer, Immunohistochemistry, Screening

