EVALUATION OF CARDIOTOXICITY BY OSIMERTINIB IN CLINICAL PRACTICE

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BACKGROUND AND IMPORTANCE

- Osimertinib is a tyrosine kinase inhibitor (TKI) indicated for the treatment of epidermal growth factor receptor mutated non-small cell lung cancer (NSCLC).
- Despite a better safety profile than other TKIs for the same indication, osimertinib could produce some potentially fatal cardiotoxicity.
- There are scarce evidence on cardiotoxicity in clinical practice with osimertinib.

AIM AND OBJECTIVES

To analyze the incidence of cardiotoxicity associated with osimertinib in the real clinical practice.

MATERIALS AND METHODS

STUDY CHARACTERISTICS

- Observational
- Cross-sectional
- In a third-level hospital

INCLUSION CRITERIA

- All patients diagnosed with NSCLC treated with osimertinib between February 2018 and May 2021

DATA COLLECTION AND SOURCE OF DATA

- Sociodemographic and treatment characteristics
- Cardiac history and cardiac events during treatment
- Comorbidities

RESULTS

33 patients were included:

- Median age of 72.5 (IQR=62.2-81.0) years
- 63.6 % were women
- 32 (96.9 %) were diagnosed with metastatic lung adenocarcinoma, 1 (3.0%) with epidermoid non-small cell lung cancer
- 60.6 % of patients received osimertinib in a second line or successive

57.6% of the patients had cardiovascular comorbidities:

- 48.5 % had arterial hypertension
- 36.4 % had dyslipidemia
- 12.1 % had diabetes mellitus
- 3.0 % had heart failure
- 21.2 % of patients had previous cardiocor events before starting osimertinib treatment
- Median time in treatment with osimertinib was 11 (IQR=4.6-17)

12.1 % of patients developed cardiologicality:

- 2 (6.1%) suffered a decrease in the Left Ventricular Ejection Fraction (LVEF)
- 1 (3.0%) experienced atypical chest pain
- 1 (3.0%) developed an increase in the D-dimer and hyperfibrinogenemia

One of the patients with LVEF decreased required hospitalization and invasive management. The rest of the cardiotoxicities were managed with dose reduction and conservative measures.

CONCLUSION AND RELEVANCE

More than 10% of osimertinib-treated patients had cardiotoxicity. Of these, 25% required hospitalization. Oncologists should always assess cardiac function at the start of osimertinib and during the follow-up.

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