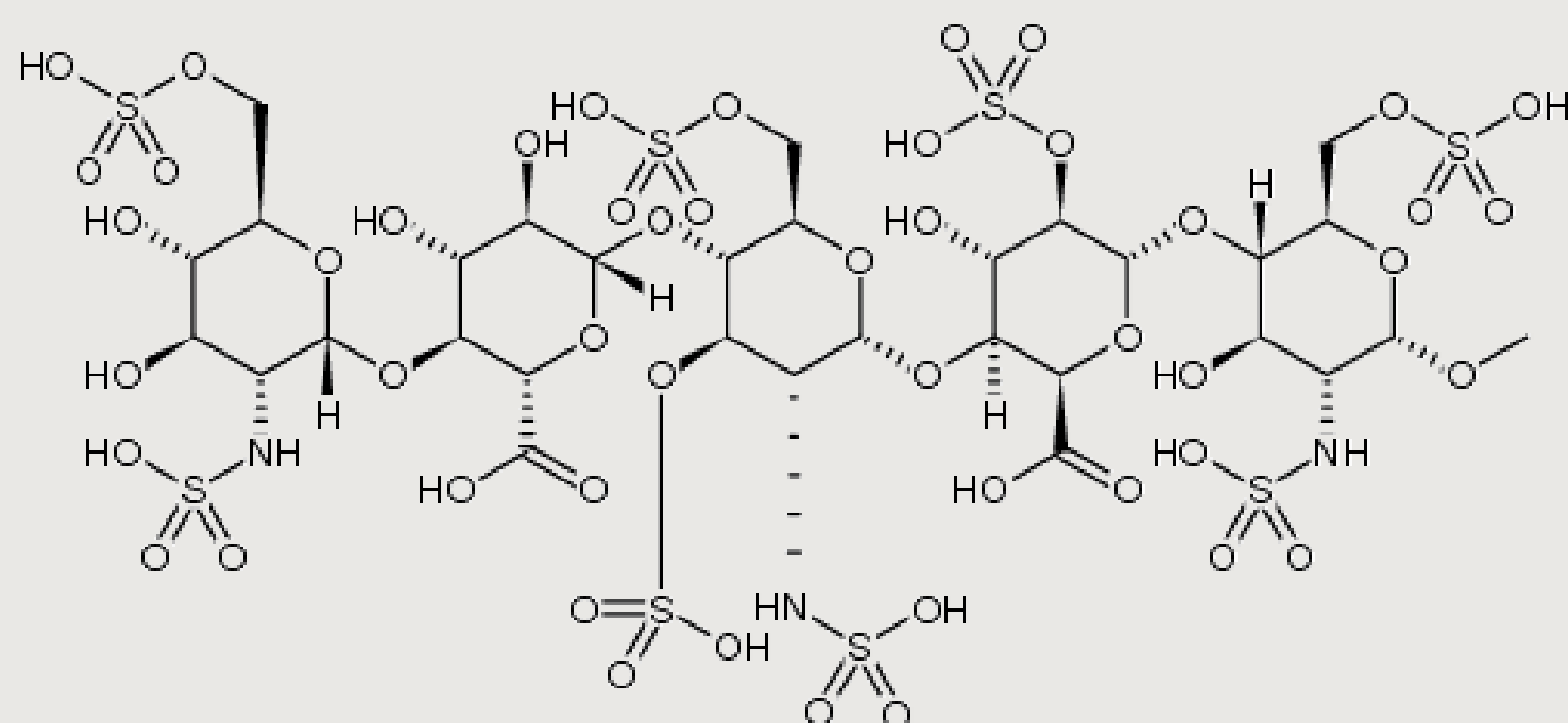


# ANALYSIS OF THE USE OF FONDAPARINUX IN SUSPECTED HEPARIN-INDUCED THROMBOCYTOPENIA

B. TAUSTE HERNÁNDEZ<sup>1</sup>, B. SANCHEZ RODRIGUEZ<sup>2</sup>, D. GAMEZ TORRES<sup>2</sup>, I. ALFEREZ GARCÍA<sup>2</sup>, F. VERDEJO RECHE<sup>2</sup>  
<sup>1</sup>HOSPITAL COMARCAL DE BAZA, PHARMACY, GRANADA, SPAIN  
<sup>2</sup>HOSPITAL TORRECÁRDENAS, PHARMACY, ALMERIA, SPAIN

## Background and importance

Heparin-induced thrombocytopenia (HIT) is a rare but serious complication caused by antibodies to the heparin/platelet factor 4 complex. It produces sudden thrombocytopenia (decrease of more than 50% of the platelet count) during the first days of treatment with thrombosis. Once the diagnosis is suspected/confirmed by antigenic methods, heparin should be discontinued and replaced with alternative anticoagulants. Fondaparinux is frequently used as “off label”.



Fondaparinux

## Aim and objectives

To analyze the relationship between fondaparinux and platelet recovery when it is used in suspected HIT, as well as the correct diagnosis of this pathology coinciding with COVID-19 pandemic, disease that also frequently produces thrombocytopenia, in a tertiary hospital.

## Material and methods

Cross-sectional descriptive observational study. All patients who started treatment with fondaparinux during 4 months were collected, coinciding with a high amount of admissions due to COVID-19. The variables collected were: sex, age, platelet count at the start of heparin or derivatives, at the beginning and end of treatment with fondaparinux, days of treatment with heparin and fondaparinux, request for antigenic tests to confirm HIT and diagnosis of COVID-19

## Results

40 patients (31 men, 77.5%) were included. The mean age was 71.5 years [32-98]. The mean platelet count at baseline was  $136 \cdot 10^3/\mu\text{l}$ , when heparin was discontinued and fondaparinux was initiated it was  $87 \cdot 10^3/\mu\text{l}$  and when fondaparinux was discontinued  $151 \cdot 10^3/\mu\text{l}$ . The median number of days with heparin was 6 [0-58], with fondaparinux 6.5 [1-41]. 57.5% (n=23) of the patients were diagnosed with COVID-19. Tests for diagnosis of HIT were requested in only 10% of cases (n=4), being confirmed in 1 patient.



## Conclusion and relevance

In our case series, there is a high number of suspected HIT. Although after treatment with fondaparinux, the platelet count recovers, this is probably due in most cases to other reasons, such as COVID-19 infection, coinciding with the recovery of the problem that causes it rather than to treatment with fondaparinux. Following the low proportion of requests for antigenic tests to confirm HIT, we consider it vitally important to promote these tests, which would avoid overdiagnosis in most patients and stop using such a common and useful drug, heparin, when thrombocytopenia is not really due to this cause.