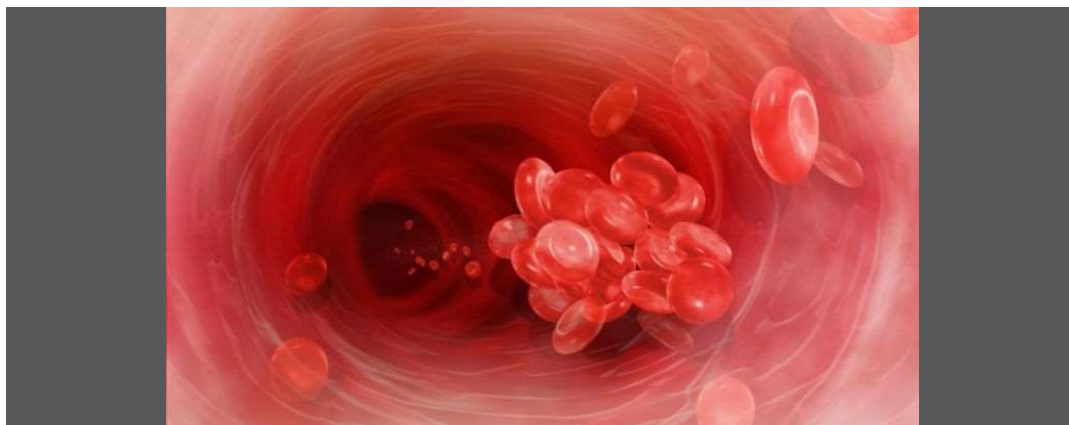


28/07/2022

The risks of anticoagulants during COVID-19 infection



Anticoagulants are drugs used in people at high risk of blood clots to reduce their risk. This study, which has the collaboration of the UAB, has compared the risk of suffering a stroke or pulmonary embolism, pneumonia, being admitted to hospital, and dying as a result of COVID-19 in users of anticoagulants and non-users.

Maria Giner Soriano

Our work included patients diagnosed with COVID-19 during the first wave of the pandemic in Catalonia, from March to June 2020, to study the severity of the COVID-19 infection by presence of pneumonia, stroke, pulmonary embolism, hospitalization, or death, comparing people chronically treated with oral anticoagulants with those people not receiving these drugs.

Anticoagulants are used in people at high risk of getting blood clots to reduce their chances of developing serious conditions, such as stroke.

We found that anticoagulant users in our study were older and had more chronic diseases than non-users. Those are well known risks for hospitalization, confirmed by our results, as we found that being treated with anticoagulants increased the risk of hospital admission, and also the risk of stroke and pulmonary embolism. On the contrary, there was a lower mortality rate in the group of anticoagulant users.

A total of 311,542 people with COVID in Catalonia during the first wave of the pandemic were registered in the SIDIAP database, which contains information from Primary Care

electronic health records from Catalonia. Of these COVID-19 patients, we finally selected 10,180 (3.3%) who were chronically treated with anticoagulants, and they were compared with 10,180 people who did not receive this treatment.

Those people who were treated with anticoagulants in our study had a 16% higher risk of being admitted to hospital and an 80% higher risk of suffering a stroke or a pulmonary embolism than those who were not treated with anticoagulants. These patients are already at higher risk of suffering stroke and that is why they take anticoagulants. On the other hand, anticoagulant users had a lower risk of death. Both anticoagulant users and non-users had similar risk of suffering pneumonia.

These differences in the complications of the COVID-19 might have been influenced by the interventions and treatments applied during the hospitalization of these patients and not only by their chronic treatment received before acquiring the COVID-19 infection.

Maria Giner-Soriano

University Institute Foundation for Primary Health Care Research Jordi Gol i Gurina (IDIAPJGol)

Universitat Autònoma de Barcelona

mginer@idiapjgol.info

References

Maria Giner-Soriano, Ainhoa Gomez-Lumbreras, Cristina Vedia, Dan Ouchi, Rosa Morros. **Risk of thrombotic events and other complications in anticoagulant users infected with SARS-CoV-2: an observational cohort study in Primary Health Care in SIDIAP (Catalonia, Spain).** *BMC Primary Care* 2022;23(147).

<https://doi.org/10.1186/s12875-022-01752-5>

[View low-bandwidth version](#)