

Outcomes of Open Surgery for Retroperitoneal Hematoma in Covid-19 Patients: Experience from a Single Centre

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Abstract

Background: Spontaneous retroperitoneal hematoma is a severe and potentially fatal complication that appears in the course of anticoagulation therapy. Therapeutic doses of low molecular weight heparin (LMWH) are used for the prevention of thrombosis in patients seriously ill with Covid-19.

Methods: We describe 27 (0.14%) patients with retroperitoneal hematomas who required emergency surgery out of 19108 patients with Covid-19 who were hospitalized in Batajnica COVID Hospital between March 2021 and March 2022. All the patients were on therapeutic doses of LMWH. The

existence of retroperitoneal hematoma was confirmed by abdominal ultrasound and computed tomography scans.

Results: Open surgery was performed on 27 patients with spontaneous retroperitoneal hematomas (12 female and 15 male). The mean age of the study population was 71.6±11.9 years. D-dimer was significantly elevated two days before the surgery in comparison with the values on the day of surgery ($p=0.011$). Six patients (22.23%) survived, while 21 (77.77%) patients died.

Conclusion: Bleeding in Covid-19 patients treated by LMWH is associated with an increased risk of developing retroperitoneal hematoma. Open surgery for retroperitoneal hematoma in Covid-19 patients on anticoagulation therapy is a procedure associated with a high rate of mortality.

Key words: spontaneous retroperitoneal hematoma, open surgery approach, Covid-19 patients, D-dimer, anticoagulant therapy