Editorial

Antiplatelet therapy and bladder tumor resection

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Comment on: Prader R, De Broca B, Chevallier D, *et al.* Outcome of Transurethral Resection of Bladder Tumor: Does Antiplatelet Therapy Really Matter? Analysis of a Retrospective Series. J Endourol 2017;31:1284-8.

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It is not uncommon to see patients taking antiplatelet drugs (APDs) for various indications who require surgery. Transurethral resection of bladder tumors (TURBT) involve removal of tumor in pieces while the blood supply to the tumor remain intact. Naturally, the risk of bleeding remains significant. Prader and colleagues have tried to address this important clinical issue. In a simple study, the authors have compared the bleeding complications of TURBT in patients receiving APDs with those patients who were not receiving these drugs (1). In the study period extending for about 2 years the authors retrospectively analyzed all 117 patients receiving APDs and 117 consecutive patients naive to APD who underwent TURBT.

Rather than measuring blood loss by performing complex analysis like measuring the hemoglobin concentration in bladder irrigation fluid at time of surgery and in the post-operative period the authors have used the length of post-operative hospital stay as a simple and practical surrogate to study the impact of APDs. Instead of measuring "statistical difference" in the hospital stay between the two groups the authors calculated "clinically significant" difference in the length of hospital stay of more than 1 day.

The authors found that there was no clinically relevant difference in the length of hospital stay in patients taking APD compared to naïve patients. Acetylsalicylic acid (ASA) did not increase the hospital stay or other morbidities of TURBT. However, the authors did find a clinically significant increase in hospital stay and complications in patients receiving clopidogrel.

After TURBT there can be some ongoing bleeding for few days (usually not gross hematuria) or may happen late after few weeks and usually presents with clot retention. In their study, Prader *et al.* mention about re-hospitalization within a month after TURBT. However, the follow-up duration in the study is missing. Also, the re-hospitalization data of only those patients who were readmitted in authors' hospital were counted. The authors have dismissed this issue by saying that as this data is missing in both the groups (patients on APD or without) hence it is not relevant. However, this assumption is incorrect. It is likely that patients receiving APD would have a higher chance of clot retention and could have consulted another nearby hospital in an emergency. Also, patients in whom APD was withdrawn/withheld could have presented in emergency in some other hospital. These data are unlikely to be similar in both groups and, therefore, cannot be dismissed.

Although, the parameter assessed in this study is length of hospital stay but the authors have not explicitly mentioned their hospital policy for discharge. Also, the guidelines regarding the optimal time of catheter removal is unknown and every surgeon has her/his own protocol for catheter removal. As this study involved many surgeons it would have been useful to know about this policy.

The debate regarding the best policy for the use of APD has been addressed by many authors (2-4). Ehrlich *et al.* in their prospective randomized trial showed that early initiation of ASA after transurethral bladder surgeries was not associated with increased incidence of post-operative bleeding. Hashad *et al.* continued all patients on 81 mg ASA and compared the difference in blood loss between patients

undergoing TURBTs using either monopolar or bipolar electrical energy in patients with tumors larger than 3 cm (3). A recent small study from Japan has confirmed the safety of APDs as regards severe hemorrhage and blood transfusion. However, the authors noted a higher risk of clot retention (4).

We congratulate Prader *et al.* for this study and feel that the issue of use of APDs needs to be answered by prospective studies involving larger numbers of patients with tumors of different sizes.

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None.

Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

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