

Nephrotic syndrome in adults: Prevention of thromboembolic risk

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Abstract

Background: Nephrotic syndrome (NS) is associated to an increased risk of thromboembolic events (TE), prompting recommendations for prophylactic anticoagulation (PAC). This study assesses the effectiveness of PAC in reducing thrombotic risk and examines the associated bleeding complications in patients with NS.

Methods: We conducted a retrospective, monocentric study including patients hospitalized with NS between January 2022 and May 2024, who received PAC. Clinical, biological, and histopathological data were analyzed, with a focus on the incidence of TE and hemorrhagic events. Patients on anticoagulants at the onset of NS, or those with contraindications, were excluded. Bleeding episodes were classified as minor or major.

Results: Among 18 patients with NS, 7 received PAC, comprising 3 women and 4 men, with a median age of 45 years [26-70]. The 24-hour proteinuria ranged from 3 to 16 g/24h, with hypoalbuminemia observed between 15 and 28 g/l. The etiologies of NS were varied, including diabetic nephropathy, membranous glomerulopathy, focal segmental glomerulosclerosis, and others. PAC regimens included vitamin K antagonists in 3 cases and unfractionated heparin in 4 cases. Over an average follow-up of 6 months, we recorded 2 TE cases. Hemorrhagic complications occurred in 4 patients receiving PAC, with 1 case of epistaxis and 3 cases of gastrointestinal bleeding. Major bleeding episodes were observed only in patients on PAC combined with antiplatelet therapy.

Conclusion: While PAC in patients with NS appears effective in reducing the risk of TE, it may be associated with an increased incidence of bleeding complications, particularly when combined with antiplatelet therapy. The risk-benefit balance of PAC in NS requires careful consideration, especially in the absence of robust clinical trial data.