Is it appropriate to use anticoagulants for thromboprophylaxis after knee arthroscopy?

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Dear editor:

We read with deep interest the article by Zheng et al. [1]. This paper explored the necessity of anticoagulants for thromboprophylaxis after knee arthroscopy by analyzing data of recent RCTs, which gave us some insight into this issue. We really appreciate the authors' work, however, some worthwhile issues need to be explored.

Firstly, all participants in one of included studies, Marlovits's study [2], were treated with anticoagulants after knee arthroscopy for 3–8 days before and then divided into treatment group and control group. By contrast, other studies did not include pre-treatment, raising a potential bias. In our opinion, Marlovits's study should be excluded from the meta-analysis.

Secondly, the authors divided knee arthroscopy into non-major surgery and major surgery for subgroup analysis, which we think is a brilliant idea. In the comparison of the incidence of DVT in patients undergoing non-major knee arthroscopy (see in Fig. 4a of the meta-analysis [1]), we think the van Adrichem's study [3] should be excluded, as this study only provided outcome of symptomatic DVT (from the design we can tell that only participants with symptoms related to thrombus were conducted ultrasound for verification). The removal of this study will lead to opposite result (95%CI 0.06–0.49, $P = 0.0009$, $I^2 = 0$), indicating that anticoagulants significantly reduce incidence of DVT in non-major knee arthroscopy.

The authors emphasize the meaning of symptomatic DVT. But what is the clinical importance of asymptomatic DVT? It is assumed that most clinical silent thrombi will resolve spontaneously, leading to no clinical complications. However, the literature is not conclusive in this area. Quinlan's

study [4] revealed that reduction of asymptomatic DVT by anticoagulants was associated with a reduction in symptomatic events, indicating that without intervention some asymptomatic DVT events might turn to be symptomatic over time. So if taking asymptomatic VTE into account, anticoagulants after knee arthroscopy seems reasonable.

We respect the great contributions of the authors and we would also be very interested in the authors' response to these issues.

Author contributions J-ZX for concept; YY for writing and revising; S-TL for revising.

Compliance with ethical standards

Conflict of interest The authors declare no conflict of interests.

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