

The experience with the Epiclose®-T vascular access closure device: a human study

Epiclose®-T vasküler giriş kapatma cihazı ile tecrübemiz: Bir insan çalışması

Dear Editor,

Arterial access complications such as pseudoaneurysm and retroperitoneal bleeding are still major problems especially for centers where large number of catheterizations are performed per day (1). For this reason, I have read the paper entitled "The experience with the Epiclose®-T vascular access closure device: a human study" by Kurşaklıoğlu et al. with great interest (2). But, there are some points that should be addressed.

As stated by authors, the most important advantage of this device is providing natural coagulation by means of directly compression over the puncture site and absence of artificial material behind. Because the other current devices, which leave artificial material behind, can lead to several complications such as femoral artery stenosis or groin infection (3). But, operation time is prolonged because of hemostasis is achieved by direct compression and the patient is mobilized and discharged from hospital too late. Their experiences show that mobilization and discharging from hospital time using Epiclose®-T vascular device was similar to those group with manual compression.

The second important subject is that the device is effective in a patient with high body mass index. First of all, this situation is contradictory with our experiences. Because arterial access complications are seen more often in obese patients (4). The author explained this contradictory situation "hemostasis balloon practice more pressure at the arterial access region by the thick soft tissue". If this opinion is true, the device is more useful in obese patients than the other method.

In the pseudoaneurysm operations, we have seen that arterial puncture site is on anterior, lateral sided or sometimes close to posterior wall of the artery. In this situation Epiclose®-T vascular access hemostasis balloon may apply a pressure over the venous system and may cause complications.

During the hemostasis balloon inflation time, they could examine the venous circulation with Doppler USG. Vascular access complication causes many problems and such complications as retroperitoneal bleeding can be lethal. Because of that, the studies which prevent vascular access complication are very important and I would like to congratulate the authors.

Sincerely

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Author's reply

Dear Sir,

We would like to thank the author for his/her comments about our manuscript entitled "The experience with the Epiclose®-T vascular access closure device: a human study".

The great advantages of this device are related to no artificial material behind and providing natural coagulation. This causes patient's safety and comfort because of no manual compression to the patient's groin is required. In this study, the first aim was to show only initial safety and efficacy of the device and patient comfort. So, there was no difference between manual compression and the device groups for the mobilization and discharge time. Maybe, it needs an additional superiority study related to mobilization and discharge times to compare those of manual compression.

As the author pointed out that the device was effective for the patient with higher body mass index. This can be explained by the fact that hemostasis balloon needs enough soft tissue in the groin for pressing the femoral artery efficiently and achieving hemostasis successfully. Hemostasis balloon can lose its correct position if there is not enough tissue for supporting the balloon. Hence, the balloon can not achieve hemostasis. Therefore, Epiclose®-T is advantageous in the patient group for whom there can be a difficulty for manual compression because of higher body mass index.

In the study, we did not use Doppler USG during the hemostasis balloon inflation time. This can be accepted as an another limitation of the study. However, the patients were followed up for 30 days. Moreover, the 30 days follow-up included physical examination with palpation and assessment of the access site and peripheral pulses, and late complications such as pseudoaneurysm and arteriovenous fistula. Fortunately, no pseudoaneurysm or other significant vessel complications occurred in the Epiclose group.

We would like to thank the author for his/her great interest and valuable comments.

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Can a city population represent a whole country? Essentials of study design for epidemiologic studies/Serum lipid profiles including non-high density lipoprotein cholesterol levels in Turkish school-children

Bir ilin popülasyonu tüm ülkeyi temsil eder mi?

Epidemiyolojik çalışmalar için çalışma tasarımının temelleri/Türk okul çocuklarında serum lipid profili ve non-HDL kolesterol düzeyleri

Dear Editor,

We have read the manuscript entitled "Serum lipid profiles including non-high density lipoprotein cholesterol levels in Turkish school