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Author's Reply

I appreciate Dr. Ozer's and Dr. Oznur's interest in our article. They state that the inappropriate positioning of the femoral tunnel seemed to result in the implant complications. With due respect, we disagree with the authors because the tunnels were actually correctly positioned in both procedures, which were performed by 2 different surgeons with different implants. In the MRI images published in the article, the tunnel is clearly positioned just adjacent to the posterior femoral cortex in the first case. In the second case, the axial cut of the MRI is proximal to the knee joint and the tunnel position at the intra-articular level cannot be seen. Other cuts of this patient's MRI that were not published show the position to be the same as in the first case.

The point of our article is that when you use a new implant, there are potential complications that can arise that may not be foreseen. Tunnel malposition does not apply to the cases we presented; therefore, we did not discuss this issue in our review.

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To the Editor:

Ilahi and colleagues (June 2005)¹ reported a pooled deep venous thrombosis (DVT) incidence rate of 9.4% after knee arthroscopy. After adjusting for sensitivity discrepancies between ultrasound and venography, the calculated incidence reaches 9.9%. The authors give venographically diagnosed DVT a 2-fold weight over ultrasonographically diagnosed DVT. As reported, evidence shows an almost 100% sensitivity for venography in contrast to 50% for ultrasound in detecting DVT in asymptomatic patients.

Sensitivity is defined as the proportion of people with the target disorder who have a positive test result.² A 50% sensitivity for ultrasonographic detection of DVT in asymptomatic patients would suggest that half of the patients having DVT would not be diagnosed; each diagnosed patient would therefore have a nondiagnosed pair (e.g., false-negative result). In order to correct this underdiagnosis and adjust to true incidence, the result that would require a 2-fold weight would be that reported for ultrasound. Taking this into account, the pooled and adjusted incidence of DVT after knee arthroscopy would be 13%.

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Author's Reply

The authors would like to thank Dr. Streubel for taking such interest in our work. The reason for weighting the results from the venographic studies more than the ultrasound studies in the meta-analysis of DVT following knee arthroscopy is that venography is a more reliable test than ultrasonography for detecting DVT. In fact, it is considered the gold standard test for diagnosing this entity.¹ When analyzing data from pooled studies, results of investigations using a more reliable and accurate test should be given more weight than results from investigations using a less accurate and less reliable test. Logic dictates that the venographic data should be given more weight than the ultrasound data in the meta-analysis.

The overall incidence rate of DVT for the 345 patients evaluated in the venographic studies was 11.0%, whereas the overall rate of DVT for the 339 patients evaluated in the ultrasonographic studies was 7.7%. Combining the data without giving extra weight to either group gives an overall DVT rate of 9.4%. As stated in our study, giving the results of the venographic studies twice the weight of the ultrasound studies leads to an increase in the overall DVT rate to 9.9%.² Not surprisingly, the overall rate increases as it moves closer to the average rate for the venographic studies, which is higher. Were the investigations using ultrasound given twice the weight of the venographic investigations, the overall rate would decrease to 8.8%. Again, this is because the increased weight will lead to a value closer to the average rate of DVT reported for the ultrasound studies, which is lower.

What is being suggested by Dr. Streubel is to compensate for the lower sensitivity of ultrasound by doubling the number of DVT detected in the ultrasound studies without doubling the number of patients in those studies. This in effect doubles the numerator without changing the denominator, leading to an overall rate of DVT for the ultrasound studies of 15.3%. That would, in turn, give an overall rate of 13.2% when combined with the results from the venographic studies, as suggested. But this line of reasoning is not simply evaluating results. Rather, it assumes a number of missed DVT in the ultrasound studies based on this