



FIGURE 3. Arthroscopic view of 2 right knees in 90° of flexion. (A) This patient has a large notch, measuring 19 mm in width. Performing ACL reconstruction in a patient with a large notch is less difficult because the surgeon has good visualization and sufficient room for instrumentation. (B) This patient has a small notch, measuring only 11 mm. Performing ACL reconstruction in a patient with a small notch can present a challenge. Drilling a smaller-diameter tunnel or using a flexible guidewire and cannulated drill might offer a solution.

We applaud Dr. Lubowitz and Dr. Shneider for their continued pursuit of a more anatomic reconstruction and willingness to discuss the trials and tribulations that they have experienced with this progression. We can all learn from their experiences and should continue to keep an open mind as we strive to better understand the ACL and its reconstruction.

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Author's Reply

Dear Drs. van Eck, Morse, and Fu,

Thank you for your response to my letter about the anterior medial portal for ACL reconstruction. I appreciate your kind words and know you enjoyed your time in East Lansing, Dr. Fu.

I do not think it is misleading to emphasize the importance of notchplasty for successful ACL reconstruction. Despite your research and early reports in performing anatomic ACL reconstruction, I believe history supports my position. Let us review how we arrived at the current state of arthroscopic ACL reconstruction.

The first reports of arthroscopic ACL reconstruction were in the early 1980s. My own first attempts were reattaching an acutely torn ACL with an Instrument Makar staple. Most failed, although all did not. The ACL stump was too short and could not be placed posterior enough to be isometric, not that we knew what was isometric at that time.

We then progressed to a semitendinosus graft doubled over an Instrument Makar staple into a femoral socket and fixed to the tibia with a staple. The results gradually improved, although many failed because they were too low and anterior in the notch. The early grafts were commonly heading into the lateral condyle (and sometimes out the back of the lateral condyle wall!).

It was not until 1989 that research appeared describing the isometric position for the femoral attachment of the graft.¹⁻³ It took some time after that to learn how to reach the described isometric point; it could not be done without adequate notchplasty. I was gradually able to refine the femoral position more posteriorly and more toward the 1- to 2-o'clock position.

Despite poor femoral location for early grafts, many of those patients did well. I even see some patients today who have very poor femoral position and have never had a problem since surgery 15 to 20 years ago.

In the early 1990s my ability to reach the isometric femoral attachment became routine. As that occurred, my results became better with few, if any, failures. The results have continued to be excellent, and there is no reason to change technique. The literature abounds with reports of good results with ACL reconstruction. Adequate notchplasty is imperative to achieve what has become standard accepted practice.

There is no question that your technique may not require notchplasty. However, if you do not go posterior past the "resident's ridge," despite being at the "anatomic lateral bundle attachment point," you are not near the isometric point established by earlier research. Placement of an isometric graft at that point has become the gold standard and has stood the test of time.

In addition, the "anatomic attachment point for the anterior medial bundle" you have defined looks just about like the femoral position I first achieved in the 1980s. That position commonly produced failures.

As I understand it, the origin of your quest for anatomic ACL reconstruction came from failures you had in your own series. In your analysis of these failures, did you find the common factor to be inadequate femoral position?

I believe that femoral graft position is the key to good results and that poor femoral position is the reason for most failures. Notchplasty is the best way to achieve the most perfect femoral position.

Finally, I would ask the question, if normal ACL anatomy has failed (i.e., ACL injury), why try to duplicate what has already failed? Why not place a 2- or 4-bundle graft at the most isometric point possible? This places the graft where it will have the most rotational control and allow the most dependable function. Placement here has a proven record and has become the gold standard.

I know we all want to provide the best care and most improvement possible for our patients with ACL injury. Obviously, there are differences in opinion as to how to achieve these. Once your series has achieved long-term follow-up, please let us all know if the "anatomic ACL reconstructions" provide results equal to or better than the current technique using the isometric point and notchplasty!

I appreciate the opportunity to have this discussion with you in *Arthroscopy*.

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Regarding the Study by Golish et al.

To the Editor:

I read with interest the article "Interference Screw Versus Suture Anchor Fixation for Subpectoral Tenodesis of the Proximal Biceps Tendon: A Cadaveric Study" by Golish et al.¹ in the October 2008 issue of *Arthroscopy*.

On page 1106 of the article, the authors discuss the study of Jayamoorthy et al.,² but they mistakenly cite this ovine cadaveric study as a human cadaveric study. With respect to that, the outcome of the study was such that the only difference between their human cadaveric study and the ovine study by Jayamoorthy