

Biologic Augmentation of Rotator Cuff Repair With Microfragmented Autologous Subacromial Bursal Tissue Enveloped in a Patch of Compressed Autologous Long Head of the Biceps Tendon: The Bio-Ravioli Technique

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Rotator cuff repair is one of the most frequently performed procedures in orthopaedic surgery; however, given the limited healing potential of the rotator cuff tendons, several augmentation strategies have evolved to enhance tendon healing. This video presents a new surgical technique called the Bio-Ravioli technique. Patients with a repairable full-thickness posterosuperior rotator cuff tear and a moderate-to-high risk of rotator cuff repair healing failure are considered candidates for the procedure. The Bio-Ravioli technique consists of microfragmented autologous subacromial bursal tissue enveloped in a patch of compressed autologous long head of the biceps tendon tissue. The rotator cuff is then repaired to the bone and over the graft via a transosseous equivalent configuration. This technique is an easy and reliable method to increase healing potential at the bone-tendon interface by using autologous mesenchymal stem cells from various sources: the long head of the biceps and the subacromial bursa.