

The Classic

Delta Shoulder Prosthesis for Rotator Cuff Rupture

Paul M. Grammont MD, Emmanuel Baulot MD

Abstract We provide a link to the original description of the “delta” reverse shoulder arthroplasty published in 1993 by Paul Grammont and Emmanuel Baulot. While many surgeons view “anatomic reconstruction” as essential for virtually all operations, Grammont recognized that not all reconstructions needed to be anatomic and in fact some problems with so-called anatomic reconstructions could be solved by developing nonanatomic approaches. Through careful reasoning and intuition, Grammont and Baulot suggested placing the ball of the shoulder on the glenoid and the concave matching surface on the humerus in patients with an absent rotator cuff (essentially rendering any anatomic reconstruction “nonanatomic” when the cuff function could not be normally restored). They argued the deltoid muscle could compensate for an absent rotator cuff if four conditions were present: (1) a lever arm effective from the start of movement; (2) a fixed center of rotation; (3) inherent stability; (4) maintenance of adequate external rotation.

The result of their reasoning was the Delta Shoulder Prosthesis, the prototype of all other modern reverse shoulder arthroplasty designs. They briefly reported 14 patients with 2-year followup, finding acceptably restored function in 13. (Editor’s Note: The original article had no Abstract; this Abstract was therefore written to provide readers a summary.) The Classic article is © 1993 and is reprinted from Grammont PM, Baulot E. Delta Shoulder Prosthesis for Rotator Cuff Rupture. *Orthopedics*. 1993;16:65–68 available at <http://www.orthosupersite.com/view.aspx?rid=84164>. An accompanying biographical sketch of Paul Grammont is available at DOI [10.1007/s11999-011-1959-y](https://doi.org/10.1007/s11999-011-1959-y).

© The Association of Bone and Joint Surgeons® 2011

Richard A. Brand MD (✉)
Clinical Orthopaedics and Related Research,
1600 Spruce Street, Philadelphia, PA 19103, USA
e-mail: dick.brand@clinorthop.org