

Grading of “Back Rolls”: Guide to Treatment Options

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“Back Rolls,” as the term indicates, are basically fat deposits on the back in the form of rolls. This is a common deformity in women, and concerns were encountered by cosmetic surgeons the world over, especially in patients with massive weight loss due to diet or bariatric surgery and who would like to wear a form hugging costume. The skin-fat envelope of the back normally adheres tightly to the underlying musculoskeletal anatomy of the rib cage. This envelope is held in place by facial attachments that are akin to the “zones of adherence” described by Rohrich et al.¹

The extent of fat deposits and number of back rolls, as well as skin laxicity, varies from person to person and also from one side to the other. The rolls surely have a zone of adherence inferiorly over which the tissue fold hangs and medially in the midline. Treatment modalities for back rolls depend on the above-mentioned variables and involve three general approaches:

1. Injection lipolysis in association with weight loss²;
2. Ultrasound-assisted lipectomy with or without skin tightening³;
3. Direct surgical excision of the skin fold⁴ as an upper back lift.

The choice of treatment depends on the specific characteristic of the back roll; hence, a classification to grade the extent of back roll would help in guiding the surgeon to choose the best possible option.

Fat deposits in the saddle bag area, abdomen, chest, and submental area have been classified clinically to guide the treatment modality, but unfortunately, we have not come across any published classification system (whether anatomical or clinical) to categorize back rolls. After retrospectively going through the photographs and surgical details of more than 1800 Indian women who have undergone back contouring in the last 17 years, we

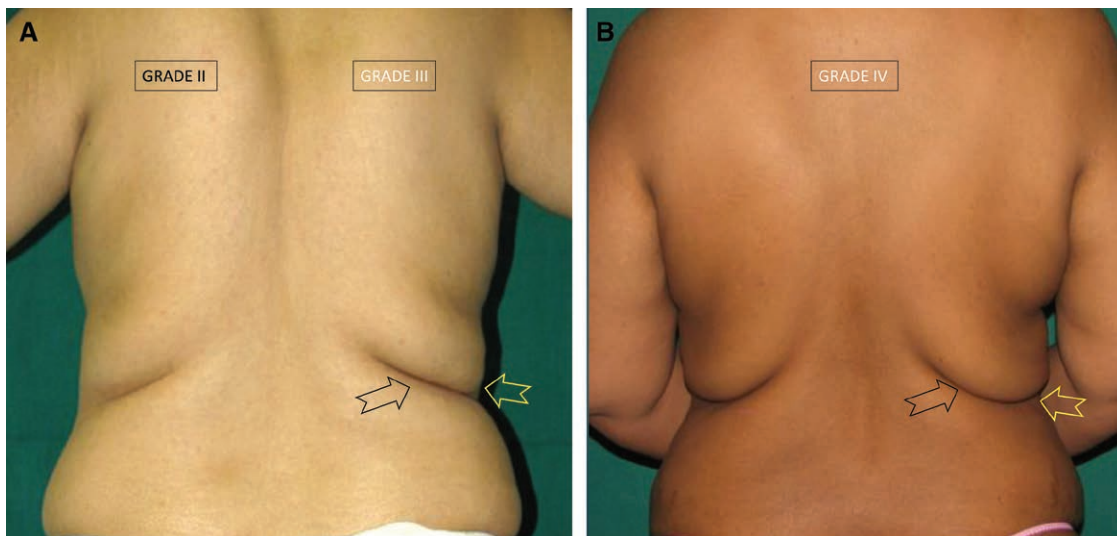


Fig. 1. Grading of back rolls as seen clinically. A, Left side shows Grade II back roll with a single incomplete indentation, whereas the right side (Grade III) shows two indentations: the lower is complete, whereas the upper is incomplete. Please note that the maximum protrusion of skin fold (yellow arrow) is higher than the inferior indentation (black arrow). B, Grade IV back roll. The maximum protrusion of skin fold (yellow arrow) is lower than the inferior indentation (black arrow).

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propose the following classification for categorizing back rolls (Fig. 1):

- Grade I: Back rolls that appear when the arms are kept by the side and disappear when the arms are raised.
- Grade II: Back rolls having a single indentation (partial or complete) that reduces when the arm is raised.
- Grade III: Back rolls with two or more skin indentations with skin pinch of more than 2 cm. The skin fold should not be lower than the inferior tethering point.

Grade IV: Back rolls secondary to massive weight loss that have multiple folds with skin pinch less than 2 cm and skin fold lower than the tethering point, or in patients who have undergone prior surgical treatment.

A lack of a comprehensive and clinically appropriate classification system prevents an accurate diagnosis, limits the use of treatment algorithm, and makes it difficult to compare treatment outcomes. We believe that this categorization can be used to guide the most appropriate treatment modality for a specific type of back roll that would be ideal. Additional studies are required to validate this classification system in other parts of the world.

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DISCLOSURE

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