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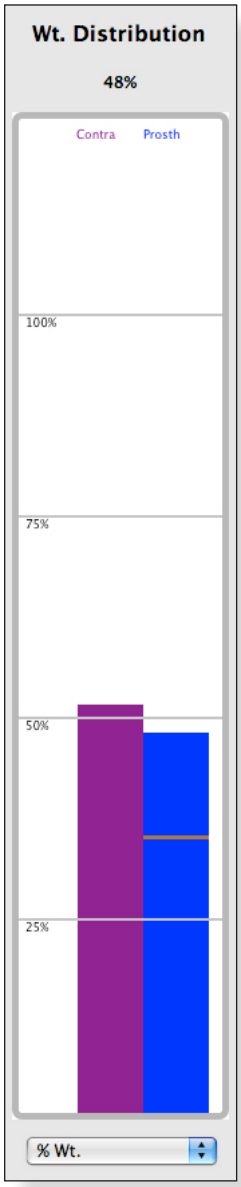
a bonus for Smart Pyramid™ Partners

Lesson 4: Helping Patients Equalize Limb Loading

This lesson will help you read the Weight Distribution graph and use it to help patients equalize their limb loading.



Weight Distribution graph

The Compas Weight Distribution graph provides three major benefits:

- **It dynamically displays loading of the prosthetic and contralateral limbs.**
- **It allows the prosthetist to better communicate with the patient about limb loading by using instant visual feedback.**
- **It allows patients to quickly improve equalization of limb loading by "seeing" which sensations represent healthy loading.**

For many amputees—especially recent ones and those who have limb pain or neuropathy—this information can be invaluable, because they may naturally have difficulty feeling and recognizing healthy socket forces.

Viewing the Weight Distribution Graph

The Weight Distribution graph is located on the Standing screen. To reach the Standing screen, begin streaming live data through the Walking screen, then click the Standing tab at the top center of the data window. This will open the Standing screen, which displays the Weight Distribution graph on the left side.

Reading the Weight Distribution Graph

The Weight Distribution graph is a vertical bar graph with two colored risers, a blue one labeled "Prosth" that dynamically displays the weight loaded onto the prosthetic limb and a purple one labeled "Contra" that represents the same for the sound limb.

To gather the information in this graph, the Smart Pyramid's strain gauges automatically detect the socket loading on the prosthetic limb while the Compas software compares it to the patient's total known weight. Compas then subtracts the weight on the prosthetic side from the total weight to learn how much is being loaded onto the contralateral side. As the patient stands or walks, the colored bars rise or drop according to the amount of weight on each side. Look at the Weight Distribution graph to detect overloading of the contralateral limb and assess the patient's ability to weight-bear on the prosthesis.

Helping Patients Equalize Loading

To help your patients train themselves using these graphs, open the Standing screen, explain to your patient what the graphs mean, then have him or her stand and weight shift without looking at the screen, trying to achieve equal weight distribution. When the patient reports feeling equalized, click the Snapshot icon to capture the results. An orange line will appear on the blue prosthetic indicator to show where it stood when you captured the data.

If the patient's weight was not equalized, show the patient the orange bar as feedback, then have the patient watch the Weight Distribution graph's live visual cues while standing and weight shifting. The visual cues "show patients what they feel" and can help them quickly learn which sensations represent healthy loading and equal weight-bearing on the prosthesis.

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