



Initial orientation for your patient in their new prosthetic:

Goals –

Build confidence

Improve function and mobility through gait re-education

Increase proprioceptive awareness (where the limb is in space)

General tips -

Treats and praise encourage correct foot placement and functional use of the prosthetic device. Properly timed cue words like “step” and “place” are also used. Always work slowly. Your patient should be on a leash when walking and a slow walk encourages use of the prosthetic limb. Faster pace allows for momentum and enables NOT using the prosthetic. Don’t progress to the next exercise unless your patient can tolerate and perform the given exercise.

Important:

Best results are achieved with the guidance of a certified canine rehabilitation professional (CCRT or CCRP). We will tailor a specific restorative rehabilitation program for your pet.

Orientation exercises -

1. Tactile stimulation of the limb (touching, rubbing, massaging) with and without the prosthetic on the limb in a non weight bearing position helps with proprioception and awareness. This also encourages comfort in the prosthetic and tolerance for handling of the residual limb.

2. Posture and stance while wearing the prosthetic
 - a. For a **thoracic limb** prosthetic, start with your patient in a square sit position with both thoracic limbs appropriately aligned in the front and contacting the ground. Practice holding this proper sit position while providing tactile stimulation to the prosthetic device and limb. Apply **gentle** side to side pressure at each shoulder in order to shift weight alternately on to each thoracic limb. Repeat in a square stance position.
 - b. For a **pelvic limb** prosthetic, position your patient in stance with the pelvic limbs aligned directly under the pelvis. Practice standing in good alignment while providing tactile stimulation to the prosthetic device and limb. Progress to gentle side to side pressure at each hip in order to shift weight alternately onto each pelvic limb.
 - c. In stance, lightly tap the prosthetic limb on the ground. Tap just medial, lateral, cranial and caudal to the properly aligned position on the ground. This helps to orient the residual limb in the device, which increases proprioception and limb awareness.

- d. In stance, pick up the contralateral limb (non-prosthetic limb) to force weight bearing on the prosthetic limb. Hold the limb up for a few seconds at a time until the patient becomes more confident. Try to increase the time standing on the prosthetic limb. Do not progress to this stage unless you have successfully managed weight shifting noted in items 2 a or b. Use lots of praise and treats.
 - e. Once 3 leg stance (2c) is managed you can progress to use of a rockerboard or balance disc to encourage weight bearing, improve proprioception, balance and core strength.
3. Early gaiting in the prosthetic.
- a. Slowly walk your patient while providing tactile stimulation to the prosthetic limb. You can tap it gently with your hand or other object to draw awareness. Couple the taps with a cue word or words such as “step” or “place.” If your patient refuses to put the limb down, apply gentle pressure over the scapula (if thoracic limb) or over the hip (if pelvic limb) to encourage weight bearing. Give lots of praise for proper use of the limb.
 - b. If your patient is reluctant to advance the limb, try one of the following:
 - i. Thoracic limb: manually advance the limb with your hand or with a theraband attached to the prosthetic
 - ii. Pelvic limb: manually advance the limb with your hand or with a theraband attached to the prosthetic and tied to a harness.
 - c. Using a slight hill or incline
 - i. Walk your patient parallel to the hill with the prosthetic limb on the down slope. Walk slowly and provide tactile stimulation to the prosthetic limb.
 - ii. Walk your patient parallel to the hill with the prosthetic limb on the up slope to encourage bending of the remaining joints.
 - iii. Walk your patient up and down the hill
 - d. Have your pet step over low objects for weight bearing and proprioceptive awareness. Low cavalettis work well. Walking up and down curbs can also be useful. Understanding where the end of the prosthetic lies in relation to the end of the limb is important. Learning to accurately step up and over is critical!