Definitive/Interim Prostheses

Amputees are initially fitted with an interim prosthesis which allows modifications to be made during the learning phase and while the stump stabilises in size. Upon completion of the learning phase, amputees are fitted with a definitive prosthesis.

Train for Reality

- All weather eg. rain, wind
- All surfaces eg grass, sand, rough ground, kerbs, carpets
- Community Access eg. escalators, crossing roads
- Crowds
- Public transport
- Lifting heavy items from floor
- Carrying liquids

Post-operative Pain

- Acute and peri-operative pain
- Phantom sensations = sensation of the presence of the body part that has been amputated
- Phantom pain = pain in the body part that has been amputated
- Stump pain = pain in the remaining part of the limb
- Pain can be referred from other sites e.g. back, shoulders

ANNUAL NATIONAL AMPUTEE AWARENESS DAY - 11 JUNE

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Education

- Phantom sensations can be very real—careful when getting out of bed, especially at night—increased risk of falling.
- Skin care—washing, drying, moisturising and massaging of stump.
- Scar massage—adherence is a risk over tibia for TTA.
- Encourage self-management.
- Change of energy requirements and weight control.

Skin Monitoring

- Teach stump and unaffected leg checks (use mirror).
- Great care of unaffected leg.
- Appropriate footwear.
- Ensure stump is dry before applying dressings or shrinker.

Oedema Management

Bandaging/ Shrinker socks:
- Increase pressure tolerance.
- Encourage conical shape.
- Decrease swelling in readiness for casting.
- Maintain constant volume.
- Provides sensory feedback thereby minimising phantom sensations.

Rigid Dressings:
- Protective.
- Good prosthetic warm-up indicator.

Positioning

- No pillows under stump.
- Avoid dependence of stump.
- Maintain knee extension in TTA.
- Prone ly to maintain hip extension ROM.
- Avoid Hip F, Abd and External Rotation in TFA.

Sensory Re-education

- Touch.
- Massage.
- Weight bearing.
- Familiarisation with mirror.
- Desensitisation modalities e.g. vibration.

Exercises

- Maintain joint range of motion.
- Increase muscle strength to assist with transfers, bed mobility and mobilising in wheelchair or with prosthesis.
- Balance re-training to help with transfers.
- Increase cardiovascular endurance for self-propelling in wheelchair and/or walking with prosthesis.
- Transtibial Amputees (TTA) require 40% more energy to walk with a prosthesis than walking with their two legs.
- Transfemoral Amputees (TFA) require 100% more energy to walk again.
- Amputees can conserve their energy by slowing down when walking and/or using a walking aid.

Transfers

- Learning to transfer safely is the key to being self-sufficient and independent after a lower limb amputation.
- Attempt a floor to chair transfer prior to discharge as it is important to know how to get up from the floor in case of a fall.

Non-Prosthetic Mobility

Amputees who wear a prosthesis need to have a back-up mode of mobility e.g. wheelchair, hopper, crutches. Practice hopping without aids, bottom shuffling or crawling if relevant.

Wheelchairs:
- Anti-tip bars can increase safety when transferring and negotiating ramps.
- Rear wheel brackets set the wheels further back and allow more space to transfer, if using a slideboard, and make the whole chair more stable.
- Stump boards should be used for all TTA to control stump oedema and knee extension.

Hopper:
- Stable but slow and does not allow step-through gait.

Two single sticks:
- Less stable but allows step through gait and reciprocal gait pattern.

One single stick:
- Enables good balance but need even weight bearing and requires increased strength and balance. Stick is usually used in hand opposite to stump side.

Crutches:
- Not usually used with prostheses as they encourage flexion and do not allow effective use of glutes which are major stability muscles required when walking.