



AMBULATION & ASSISTIVE DEVICES

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- Ambulate=the act of walking
- Assistive devices=tools, products or types of equipment that help you perform tasks and activities if you have a disability
- Assistive devices may help you move around, see, communicate, eat, or get dressed. Some are high-tech tools, such as computers. Others are much simpler, like a "reacher" - a tool that helps you grab an object you can't reach.



ASSISTIVE DEVICES

Can you name some assistive devices?

- Transfer (gait) belt
- Crutches
- Cane
- Walker



TRANSFER (GAIT) BELT

- Transfer belt=band of fabric or leather that is positioned around a pt's waist during transfers or ambulation
- It is held by the HCW to provide additional support for the pt
- It gives the pt a sense of security & helps stabilize the pt's center of balance
- It should fit around the waist but not be too tight for comfort
- Apply it over the pt's clothing



TRANSFER (GAIT) BELT

- Some transfer belts have loops that are grasped by the HCW
- If there are no loops, use an underhand grasp to hold on to the belt during ambulation so your hand doesn't slip off
- Grasp the belt at the back & walk slightly behind the pt



TRANSFER (GAIT) BELT

- When assisting pt to stand or during transfers, grasp belt on both sides while facing the pt



CRUTCHES

- Assistive device for pts who are unable to use one leg or who need to gain strength in both legs
- Used to reduce the weight load on one leg and broaden the support base to improve balance and stability
- There are several ways to walk with crutches depending on if the pt needs them for weight bearing, non-weight bearing or partial weight bearing



CRUTCH SAFETY

- There should be a 2-inch gap between the axilla and the axillary bar
- Each elbow should be flexed 25-30 degrees
- Pt should wear low heeled shoes with nonskid soles
- Educate pt that nerve damage can occur if weight is supported constantly on the arm rest



USING CRUTCHES

- Blue text book page 648
- <https://www.youtube.com/watch?v=jcKJMCbQrL0>
- **2-point gait:** faster than 4-point gait, similar to walking. R crutch & L foot move forward then L crutch & R foot move forward
- **3-point gait:** must be able to bear weight on one leg. Both crutches & weaker leg move forward then strong leg moves forward to meet the other foot
- **4-point gait:** provides wide base of support & weight bearing on both legs. One crutch moves ahead 4-6" then opposite foot moves ahead to level of crutch. 2nd crutch moves forward the same distance then 2nd foot moves forward to meet crutch level



USING CRUTCHES

- **Swing-to gait:** partial weight bearing on both legs must be allowed. Both crutches move forward then pt swing legs to the crutches by lifting their body with their arms.

https://www.youtube.com/watch?v=QfhjTQcb_8Q

- **Swing-through gait:** similar to swing-to but faster-paced. Both crutches move forward then pt swings the legs through to the other side of the crutches, lifting their body with their arms.

<https://www.youtube.com/watch?v=cEq2KYrNwpU&spfrload=10>

CANES

- Help pts who have weakness on one side of the body gain balance and support
- There are several different types of canes
- 3-point (tripod) & 4-point (quad) canes should be used by pts who need maximum support
- A single-point cane can be used by pts who need less support



CANE SAFETY

- Ensure that the bottom has a rubber suction tip
- Pt should wear low heeled shoes with nonskid soles
- Pt should hold cane on the stronger or unaffected side of the body
- Top of cane should be level with top of femur
- Pt's elbow should be flexed at 25-30 degrees



USING A CANE

- Pt should balance their weight on the strong or unaffected foot and then move cane forward
- Then move the weak or affected foot forward
- Transfer their weight to the affected foot and cane
- Then move the unaffected foot forward

<https://www.youtube.com/watch?v=R0r6a8AE6Xw>



WALKER

- Assistive device with a frame, handgrips, and 4 points at the bottom
- Walkers are used when a pt needs more support than a cane or crutches can provide



WALKER SAFETY

- Ensure the rubber suction tips are secure on all the legs
- Pt should wear low heeled shoes with nonskid soles
- Hand rest should be level with the tops of the femurs
- Pt's elbows should be flexed at 25-30 degrees
- Educate pt that they should avoid sliding the walker because it can tip forward & cause them to fall
- Pt shouldn't shuffle their feet while using a walker



USING A WALKER

- Start with the pt standing “inside” the walker
- Pt should lift the walker and place it forward so that the back legs of the walker are even with the pt’s toes.
- Pt should then transfer their weight forward slightly to the walker
- Now have pt use the walker for support and walk “into” the walker

start at 0:32 mark

https://www.youtube.com/watch?v=vRe3_FbpwQM

