

Guideline of Walking with Assistive Device



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I. Adjustment of devices

A. Walker, Quadricane and Cane :

- 1) Stand upright with the back straight.
- 2) Elbow should be in slight flexion (about 15 to 30 degree), when holding the devices.

B. Axillary crutch

- 1) Stand upright with the back straight. Put axillary crutch two-fingers width (about 5 cm) below armpit.
- 2) The rubbery ends should be at 5 cm aside and 15 cm front of the 5th toe.
- 3) Adjust the height of handle so that elbows could keep flexing at about 20 to 30 degree.

II. Walking pattern

Three-point walking pattern (for beginner)

1. Stand strait then move walker or axillary crutch 25~30 cm forward with both hands in a synchronous manner (fig. 2). As for Qudricane, cane and uni-axillary crutch,

hold the device at sound side then move 25~30 cm forward (fig. 4).

2. Step out the affected side.

For walker users, affected side should not exceed the front of walker. (fig. 2)

For axillary crutch, step a little backwards of the line between two rubber bottoms which means the step should not over the two rubber bottoms.

For cane, quadricane and uni-axillary crutch, affected side should not exceed the device. (fig. 5)

3. Step out the sound side even to affected side with back straight and both elbow straight to help affected side bearing weight (weight can affected side bear; this variable should be consulted to a doctor or physical therapist). When using axillary crutches, never lean all the body weight on the armpit or brachial plexus could be easily injured. When step sound side by using walker, cane, quadricane and uni-axillary crutch, body

weight should also be borne by affected side, and only by the time affected side can carry half of the body weight. (fig.3) and (fig.6)

Demonstration of walking with walker (The affected side is the left leg with bandage)

		
<p>Fig 1 Lift the walker forward with one step about 25-30cm.</p>	<p>Fig 2 Affected side should not exceed the front of walker.</p>	<p>Fig 3 Step out the sound side even to the affected side with body weight supported by both arms.</p>

Demonstration of walking with quadricane (The affected side is the left leg with bandage)

		
<p>Fig 4 Lift the quadricane forward with one step about 25-30cm.</p>	<p>Affected side should not exceed the front of quadricane.</p>	<p>Fig 6 Step out the sound side even to the affected side with body weight supported by right arm.</p>

Reference :

物理治療師實習手冊 (一) 神經疾病物理治療學 呂麗華 編著 2009.05

輔具評估專業技術手冊 王淳厚、成戎珠、吳英黛、吳雪玉、

李淑貞、俞佳鈴、施啟明、胡名霞 編著 2007