

Functional Assessment

Case study

Moana Davis – DOB 30/11/1953 – 59yrs

Diagnosis: Left Brachial Plexus Injury

History – Tripped over steps 2/10/2012 and dislocated her left shoulder which was reduced 2 hours later in an Emergency Department. She had noticed decreased sensation in her fingers and weakness in the arm from the time of injury.

Unfortunately at some stage before being seen at Green Lane Orthopaedic clinic she was placed into a dynamic radial nerve type splint which pulled her fingers into extension at the MCP joints.

When reviewed at clinic in June 2013 she had developed hyperextension contractures of the MCPJs and flexion contractures of the PIPJs of all fingers. The 1st web was also contracted.

Social - Moana is a right hand dominant process worker. She makes and assembles parts for shower mixers and for taps. Until the time of injury she was a competitive netball player.

Sollerman Test - all tests performed with left hand except those which are essentially 2handed activities

Able to grasp the key
– unable to turn it in
the lock



AMoana is to be assessed by an OT for adaptive equipment .

To cut an onion she places it in the plug hole.

She cannot open a can - waits for a family member to come home and do it.



Able to turn a door knob – a recently acquired skill with improved key pinch



Able to open a loose jar lid – unable to open a tight lid – left hand manipulating



Opening Jar – left hand stabilising



Able to lift and place iron in box



Using a screwdriver – required enlarged grip to hold - difficult and slow manoeuvre

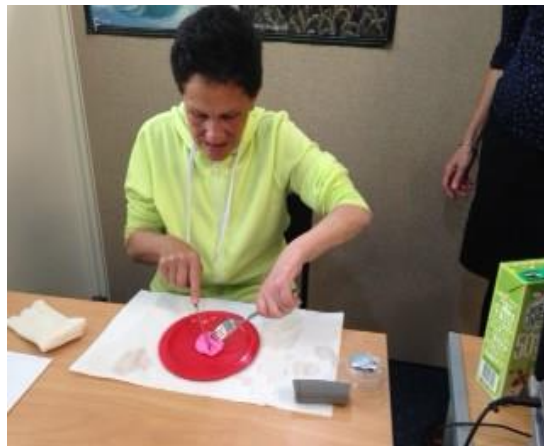




Picking up a nut and screwing onto a bolt was accomplished eventually but was difficult



Picked up coins with difficulty – unable to place in purse and unable to zip up



Required enlarged grip to hold fork – able to cut putty



Able to undo and do up buttons – 2 hands



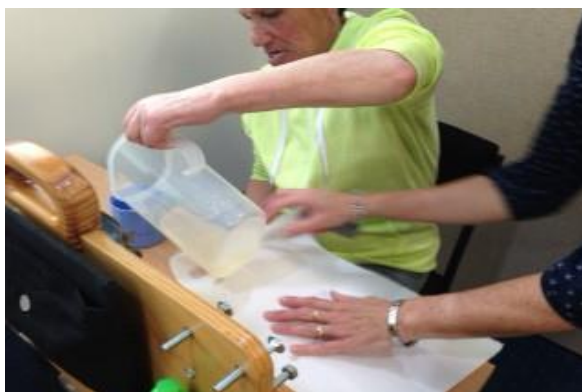
Span grip – able to lift and place block



Able to pick and pour tetra pak



Difficulty to pick up jug with 1 cup of water and pour – could not empty completely





Picking up a cup of water and pouring – able to do – small handles difficult



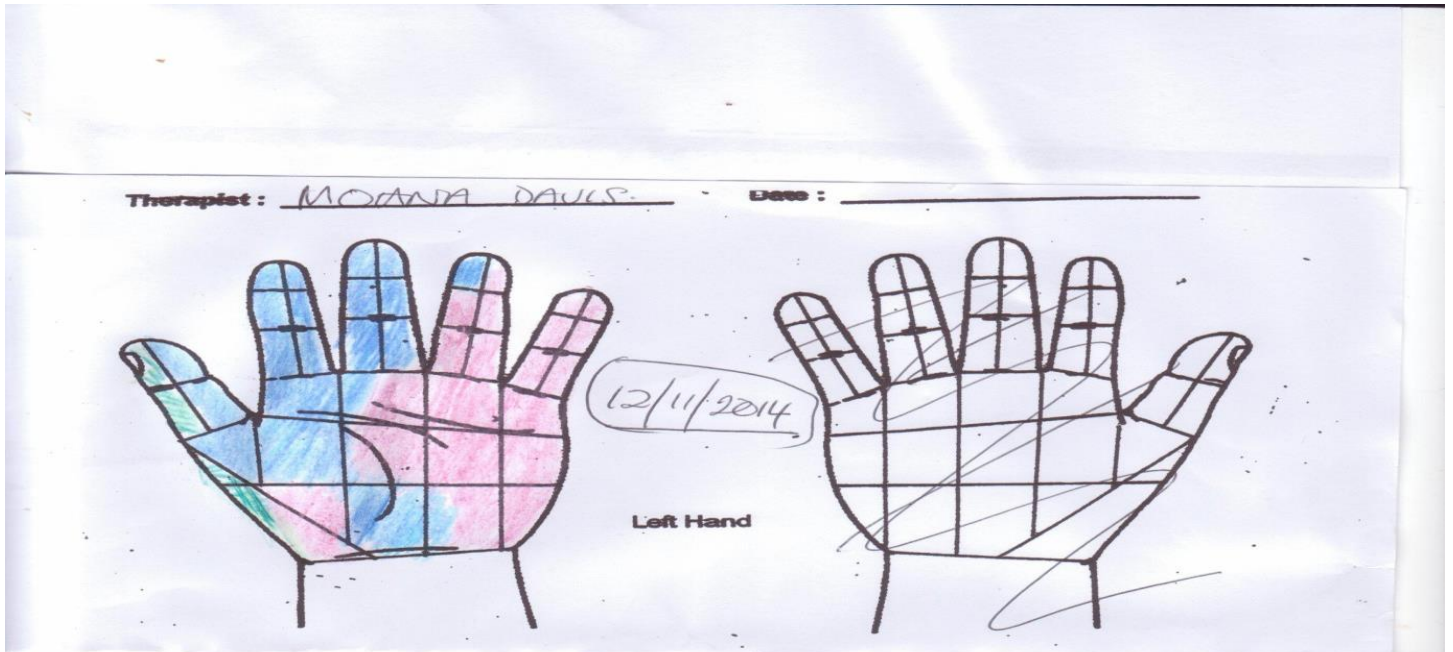
Putting on and taking off tubigrip sleeve – no trouble pulling on – could not pull off



Able to fold paper, put in envelope, seal envelop and attach a paper clip

Sensory Chart – WEST Monofilaments –

Green = normal, Blue = diminished light touch, Pink = diminished protective sensation



Power Grip - left = 2kg

right = 28kg

Key pinch – left = 0.25kg right = 6kg

MCPJ flexion - active/passive:

IF = 45/55, MF = 45/55, RF = 55/70, LF = 50/70

PIPJ extension – active/passive:

IF = 45/20, MF = 50/20, RF = 50/20, LF = 50/30

MOANA DAVIS 12/11/2014

QuickDASH

WORK MODULE (OPTIONAL)

The following questions ask about the impact of your arm, shoulder or hand problem on your ability to work (including homemaking if that is your main work role).

Please indicate what your job/work is: PROCESS WORKER

I do not work. (You may skip this section.)

Please circle the number that best describes your physical ability in the past week.

Did you have any difficulty:	NO DIFFICULTY	MILD DIFFICULTY	MODERATE DIFFICULTY	SEVERE DIFFICULTY	UNABLE
1. using your usual technique for your work?	1	2	3	4	5
2. doing your usual work because of arm, shoulder or hand pain?	1	2	3	4	5
3. doing your work as well as you would like?	1	2	3	4	5
4. spending your usual amount of time doing your work?	1	2	3	4	5

SPORTS/PERFORMING ARTS MODULE (OPTIONAL)

The following questions relate to the impact of your arm, shoulder or hand problem on playing your musical instrument or sport or both. If you play more than one sport or instrument (or play both), please answer with respect to that activity which is most important to you.

Please indicate the sport or instrument which is most important to you: NETBALL, SOFT BALL

I do not play a sport or an instrument. (You may skip this section.)

Please circle the number that best describes your physical ability in the past week.

Did you have any difficulty:	NO DIFFICULTY	MILD DIFFICULTY	MODERATE DIFFICULTY	SEVERE DIFFICULTY	UNABLE
1. using your usual technique for playing your instrument or sport?	1	2	3	4	5
2. playing your musical instrument or sport because of arm, shoulder or hand pain?	1	2	3	4	5
3. playing your musical instrument or sport as well as you would like?	1	2	3	4	5
4. spending your usual amount of time practising or playing your instrument or sport?	1	2	3	4	5

SCORING THE OPTIONAL MODULES: Add up assigned values for each response; divide by 4 (number of items); subtract 1; multiply by 25.
An optional module score may not be calculated if there are any missing items.

QuickDASH

Please rate your ability to do the following activities in the last week by circling the number below the appropriate response.

	NO DIFFICULTY	MILD DIFFICULTY	MODERATE DIFFICULTY	SEVERE DIFFICULTY	UNABLE
1. Open a tight or new jar.	1	2	3	4	5
2. Do heavy household chores (e.g., wash walls, floors).	1	2	3	4	5
3. Carry a shopping bag or briefcase.	1	2	3	4	5
4. Wash your back.	1	2	3	4	5
5. Use a knife to cut food.	1	2	3	4	5
6. Recreational activities in which you take some force or impact through your arm, shoulder or hand (e.g., golf, hammering, tennis, etc.).	1	2	3	4	5

	NOT AT ALL	SLIGHTLY	MODERATELY	QUITE A BIT	EXTREMELY
7. During the past week, to what extent has your arm, shoulder or hand problem interfered with your normal social activities with family, friends, neighbours or groups?	1	2	3	4	5

	NOT LIMITED AT ALL	SLIGHTLY LIMITED	MODERATELY LIMITED	VERY LIMITED	UNABLE
8. During the past week, were you limited in your work or other regular daily activities as a result of your arm, shoulder or hand problem?	1	2	3	4	5

Please rate the severity of the following symptoms in the last week. (circle number)

	NONE	MILD	MODERATE	SEVERE	EXTREME
9. Arm, shoulder or hand pain.	1	2	3	4	5
10. Tingling (pins and needles) in your arm, shoulder or hand.	1	2	3	4	5

	NO DIFFICULTY	MILD DIFFICULTY	MODERATE DIFFICULTY	SEVERE DIFFICULTY	SO MUCH DIFFICULTY THAT I CAN'T SLEEP
11. During the past week, how much difficulty have you had sleeping because of the pain in your arm, shoulder or hand? (circle number)	1	2	3	4	5

QuickDASH DISABILITY/SYMPATOM SCORE = $\left(\left[\frac{\text{sum of } n \text{ responses}}{n} \right] - 1 \right) \times 25$, where n is equal to the number of completed responses.

A QuickDASH score may not be calculated if there is greater than 1 missing item.