Knowledge is power – developing an online resource of Paediatric burns specific exercises.

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PTX – www.physiotherapyexercises.com

• Freely available, web based resource – no subscription fees, accessible worldwide wherever internet is available
• Allows therapists to design exercise booklets of appropriate, meaningful and specific exercises for their burns patients
• Programs can be printed or sent to a mobile device via the app
• Treatment compliance can be monitored via the app
The process

• PTX coordinators, NSW SBIS Therapy group and network manager met to develop a consensus on burns specific exercises to be included – both independent and carer assisted exercises
• Paediatric burns survivors were approached to demonstrate each exercise for photography – specific consent gained for use of photos on the internet
• Artist engaged to sketch the exercise from the photograph
• Detailed text written for each exercise – therapist instruction, patient/care giver instruction, precautions and contraindications, modifications and progressions
This is a valuable resource

- For experienced burns clinicians – improve engagement with and effectiveness of therapy
- For less experienced burns clinicians – guide to exercises required to effectively manage contractile forces of burns scars in specific areas
- For burns survivors and their carers – access individualised detailed rehabilitation programs, empowered in their recovery
- Potential for extensive use by therapists working in remote areas and developing countries
Example of exercises

Anterior hip, neck and trunk stretch up onto hands

**Therapist’s aim**
To maintain or improve ROM and stretch tight tissue over the hips, trunk and neck.

**Client’s aim**
To stretch tight tissue over your hips, trunk and neck

**Therapist’s instructions**
Instruct the patient to lie in prone with their upper-body supported through their elbows. Instruct the patient to raise the chest off the bed by pushing through their hands to prop on extended elbows. To increase the stretch the patient can include neck extension with their mouth closed.

**Client’s instructions**
Lie on your stomach with your upper-body supported through your elbows. Raise your chest off the bed by pushing through your hands to straighten your elbows. Increase the stretch by looking up at the ceiling with your mouth closed.

Assisted neck stretch over the edge of the bed

**Therapist’s aim**
To maintain or improve ROM and stretch tight tissue over the anterior neck.

**Client’s aim**
To stretch tight tissue over the front of your neck.

**Therapist’s instructions**
Instruct the patient to lie on their back with their shoulders in line with the edge of the bed. Instruct the patient to close their mouth and thrust their chin forwards. The therapist or carer with hold the weight of the patient’s head and gradually extend the neck bringing the head back over the edge of the bed. Gentle pressure is applied to keep the chin forward and maintain the stretch.

**Client’s instructions**
Lie on your back with your shoulders in line with the edge of the bed. Close your mouth and thrust your chin forwards. Your therapist or carer will assist you to stretch your neck and bring your head back over the edge of the bed while helping to keep your chin forward.

**Progressions and variations**
The therapist or carer can rotate, side flex or use a combination of all movements to find the position of maximum tension for the individual patient.

**Precautions**
Extreme neck positions can cause dizziness or nausea in some patients. The stretch should be reversed immediately if the patient reports any of these symptoms. Ensure the head is well supported by the carer or therapist throughout the exercise, to avoid injury to the neck.
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PTX or www.physiotherapyexercises.com is a freely available, web based resource that allows therapists to design exercise booklets of appropriate, meaningful and specific exercises for their patients. PTX and NSW expert burns clinicians have developed a catalogue of specific exercises for managing paediatric patients following burn injury, as the exercises prescribed and treatment course is significantly different for the paediatric population.

Benefits of the PTX website:
• Freely available
• Accessible by therapists all over the world
• Can enhance therapists understanding of burn specific rehabilitation exercises
• Allows design of exercise programs that appropriately meet therapy goals
• Individualised programs can be printed or sent to a client’s device via the mobile app
• Can monitor compliance with treatment via the app
• Each exercise includes sketch, photo, instructions for both client and therapist, precautions and modifications

This is a valuable resource:
• for experienced burns clinicians who can use it to improve engagement with and effectiveness of their therapy program
• for less experienced clinicians who can use it as a guide to the types of exercises needed to effectively manage the contractile forces of burns scars in specific areas
• for burns survivors and their carers who can access detailed copies of their rehabilitation programs to empower them in their recovery

Paediatric burn survivors have been used to demonstrate each exercise.

Both independent and assisted exercises have been included.