Soft tissue mobilization with movement to improve cervical and shoulder range of motion post-thyroidectomy in a 36-year-old male: A case report

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PURPOSE:

Thyroid cancer has increased in prevalence in the United States.[1] Medical guidelines recommend thyroidectomy for metastatic cancer.[2] Total thyroidectomy may result in complications, such as nerve damage, general stiffness, and morbidity.[3-5]

The purpose of this case report is to describe the effectiveness of soft tissue mobilization with movement (STMM) to improve cervical and shoulder range of motion status-post thyroidectomy in a 36-year-old male.

CASE DESCRIPTION:

A 36-year-old male sought physical therapy services one-month status post total thyroidectomy with lymph node dissection in his neck and right axilla.

Impairments

- A/PROM
- Strength
- Joint mobility
- Hypertrophic scar
- Pain

Limitations

- Driving
- Lifting
- Reaching
- Static positions

Participation

- Working
- Family & social outings
- Playing with children

Environmental

- Supportive family
- Financial support

Personal

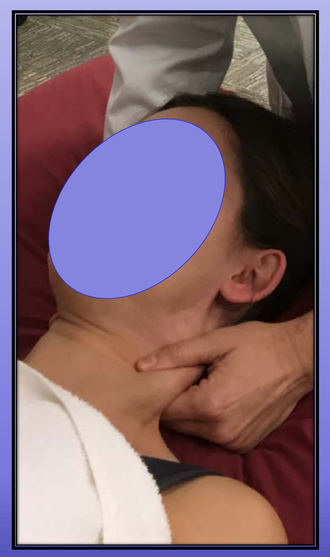
- Motivated
- 36-years old
- Cancer

METHODS:

Standard physical therapy was complimented with STMM technique to the neck and right shoulder soft tissues for 3 sessions per week for 8 weeks. Physical therapy consisted of manual therapy, strengthening/ROM exercises, and neuromuscular re-education to the deep cervical flexors and right trapezius. The STMM utilizes compression, tension, and shear forces to superficial and deep tissues with passive and active motion followed by static hold stretching.

Shorten → **Compress** → **Lengthen** → **Release**

Start position for sternocleidomastoid



End position for sternocleidomastoid

Position for latissimus dorsi and subscapularis

RESULTS:

	Measurement	Session 1	Session 20
Cervical (% WNL)	**Extension**	25%*	75%*
	RR / LR	25%* / 50%*	100% / 75%
	RSB / LSB	25% * / 25%*	100%* / 75%*
Right Shoulder (A/PROM)	**Flexion**	134^0* / 163^0*	135^0 / 172^0
	ABD	94^0* / 155^0*	114^0 / 170^0
NPRS	**Pain Best**	4/10	0/10
	Pain Worst	7/10	3/10
Other Tests	**DCF Endurance**	0 sec	8 sec
	NDI	42% Disability	12% Disability

*Pain reported

CLINICAL APPLICATION:

When addressing hypertrophic scarring and ROM restrictions after total thyroidectomy, a beneficial myofascial treatment may include STMM. A home program could incorporate STMM or self-myofascial release as well.

REFERENCES:

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