

Text Neck – Its Effects on Posture

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Abstract

Text neck is a condition which developed during recent times which mostly develop due to repeated stress on the soft tissues and results due to prolonged usage of mobile phones, hand held devises. Text neck is also mentioned as turtle neck syndrome/ turtle neck posture. It has significantly affected younger generation more as compared to older where 87% teenagers show symptoms of text neck. Most common symptoms includes Stiffness in and around cervical spine, persistent pain around cervical spine which may radiate to shoulder joint , cervical spine muscular weakness, episodes of headache, Text neck syndrome mostly lead to development of muscle soreness and pain commonly causes neck pain and upper back pain, muscle and muscle tightness. Text neck rehabilitation considered to be very effective as it targets correction of posture and conditioning of soft tissues. Management of text neck designed as per severity of condition and mostly involves 2 – 4 week duration program. Management mostly targets release of tight structures with the help of grade 1 and grade 2 mobilizations, active and passive stretches of tight muscles and progressing to muscle strengthening, posture retraining and home exercise program. Hence it is concluded that text neck has significant effect on the posture and may lead to severe musculoskeletal deformity

Introduction Present generation is completely dependent on mobile phones for performing their daily activities which gradually affects their upper back and cervical spine posture. While using mobile phones excessive stress placed on the cervical spine especially its orientation and supporting soft tissues. It is very common in present scenario where people are mostly looking their mobile phones for longer duration and spending their time in forward bending posture which produces stress in the facet joints and cervical spine eventually lead to development of alteration in the static posture of cervical spine¹. Text neck is a term which described as a situation where cervical spine is continuously under enormous stress and pressure.

Text neck is also known as turtle neck syndrome/ posture. It is a serious concern for today's younger generation who spent lot of time while using mobile phones². Latest reports exhibits Almost around 87% younger generation in USA spent majority of their time on smart phones even adults spent their time while performing their task on smart phones.³ Text neck has not only observed in teenager or younger population it is also observed among elderly population as well since dependency on social media has increased tremendously for communication and others activities³.

It has been established that working on mobile phones in head down posture has significantly affected cervical spine orientation and gradually lead to development of text neck syndrome which is an common health hazard.^{4,5}

The term 'Text Neck' was devised by Dr. DL Fishman, a US chiropractor. This condition is a growing lifestyle and health pathology which significantly affected majority of population worldwide. Apart from neck pain, it can also cause shoulder pain, upper back pain, headaches and increased [thoracic kyphosis](#).^[1,6]

Modern lifestyle has several benefits but it also significantly affected health status to an extent where it leads to development of disorders. Presently excessive utilization of mobile phones and hand held devices lead to development of pathology known as 'Text Neck' ^{7,8}. Considering effect of text syndrome on cervical spine and upper back posture rehabilitation and early prevention is highly recommended. Text Neck also termed as 'Turtle neck' explained as persistent and prolonged stress and strain over cervical spine which results from excessive utilization of mobile phone and hand held devises.^{9,10} Gradually text neck syndrome lead to development of alteration in thoracic spine curvature since excessive forward head posture affects orientation of thoracic vertebrae.^{11,12} It has become a serious issue and health concern among children as well since screen timings is extensively increased among children and which may lead to serious damage on their posture. Serious permanent damage of untreated text neck can be the result and be quite similar to occupational overuse syndrome or repeated stress/strain injuries⁹

Symptoms of Text Neck

Working in forward head posture while working on smart phone significantly affects spine curvature and soft tissues supporting cervical and thoracic spine eventually lead to stiffness and muscle soreness. Text neck is also often considered occupational related health hazard.⁴ Text neck most commonly presented as stiff neck and muscle soreness. Following are common symptoms observed¹

Neck Stiffness – stiffness of cervical and thoracic spine mostly presented after prolonged usage mobile phones.

Pain- pain observed in and around the spine initially and if not treated may radiate till shoulder, elbow and wrist. Mostly pain appears as stabbing in nature, dull aching and diffuse

Muscular weakness: Muscular weakness is also observed among shoulders muscles especially trapezius, rhomboids and shoulder external rotators.

Headache – tension relate headache observed primarily due to tightness of sub occipital muscle.

Upper back pain – Text neck syndrome involves working in head down posture especially posture adapted while using mobile phones. Such posture gradually leads to development of forward head posture and eventually upper back pain. Upper back pain may be sharp initially and later on lead to development of severe muscle spasm.

Cervical nerve root impingement- In severe cases when posture alterations made, it will lead to impingement of cervical nerve roots which lead to development of radiating pain till upper arm, forearm and also till scapular region.⁶

There may be development of flattening of thoracic spine causing kyphosis.

Early onset of cervical arthritis, symptoms of spinal degeneration, intervertebral disc compression may be observed. Stiffness of thoracic spine, reduced thoracic mobility and reduced lung capacity^{13,14}

Management

Text neck syndrome is best managed by taking preventive measures. Following preventive measures should be considered while working with smart phone and other hand held devices³

1. Excessive utilization and prolonged continuous usage should be avoided. One should take frequent breaks in between while working on smartphones.
2. One should avoid place the mobile phone in such a posture where it will place reduced stress and strain on cervical spine, head and upper extremity.
3. Excessive typing activities must be avoided
4. One should avoid holding of heavy and large objects for longer duration in one hand

Rehabilitation

Stress injuries are often managed by conservative rehabilitation in early phase. Rehabilitation of text neck involves 2-4 week program. In 4 weeks duration most of the symptoms usually gets resolved. Rehabilitation initially focused on grade 1 and grade 2 soft tissue and joint mobilizations.

Active stretches and passive stretches mostly performed to release muscle spasm. Muscle strengthening exercises also executed once pain and mobility is improved. Progressive muscle strengthening exercises further followed by joint mobilization.⁵

In acute cases pain relief is prime concern hence once pain is relieved neck movements like flexion, extension, side bending and rotation movements should be performed.

Stretching also plays important role in maintaining the length of the muscle and other supporting soft tissues hence muscle stretching especially trapezius upper fiber, lower fiber, scapular muscles and shoulder muscles should be performed to maintain the flexibility of muscles.

Range of motion exercise is also important to maintain the flexibility of muscles, mostly active movements of cervical spine and shoulder joint helps a lot in maintaining the length. Chin tucks should be practiced.^{11,12,13}

Icing initially performed controls swelling and can be combined with massage

Some people will also benefit from a more comprehensive treatment plan, such as a combination of manual adjustments, massage therapy, and [cold laser therapy](#).⁶

- **Adjustment needs to be made to avoid cervical spine pain especially while using smart phones, while texting and while performing work in front of screen. Height of screen is very important**
- **Height of the phone need to be maintained as per eye level hence neck bending needs to be avoided.**
- **One should take frequent breaks in between.** Frequent breaks recommended to avoid static neck posture. Activities which involve lot of forward head posture must be avoided since it executes lot of pressure on cervical spine.
- **Adapt correct posture.** Good posture, with the shoulders pulled back, keeps the body aligned in a neutral position.
- **Arch and stretch.** Arch the neck and upper back backward periodically to ease muscle pain. Stay fit. A strong, flexible back and neck are more able to handle extra stress.
- In chronic cases apart from pain medication, trigger point release and acupuncture can be done [\[14,15,16\]](#)

Conclusion – Text Neck has significant effect on cervical spine posture which resulted due to excessive usage of smart phone in altered posture.

Key words – cervical spine, neck pain, text Neck, neck posture.

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