

Text Neck – Its Effects on Posture

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Abstract

Introduction Text neck is a Modern age term coined to describe repeated stress injury and pain in the neck resulting from excessive watching or texting on hand held devices over a sustained period of time.¹ It is also often known as Turtle Neck posture. It is a cause for increasing concern especially with children given their greater propensity to mobile phone usage.² Recent figures have shown that around 87% of teenagers (14-18 years) in USA and 79% teenagers (12-15 years) in UK own and use smart phones.

Symptoms- Stiff neck, pain, Radiating pain,, Muscular weakness, Headache, Text neck most commonly causes neck pain and soreness, Upper back pain, Shoulder pain and tightness.

Management- Rehabilitation is found to be very effective in treating the stress injury resulting from Text Neck. Rehabilitation can be designed as a 2-4 week program starting with soft tissue mobilization, Grade 1 and 2 joint mobilizations, active and passive stretches of tight muscles and progressing to muscle strengthening, posture retraining and home exercise program.³

Conclusion – Text Neck is affects neck posture due to excessive use of Smart phones in wrong posture.

Key words – Neck pain, text Neck, Posture, neck Mechanics

Introduction

Never before has a technology been so universally accepted as the modern era cell phone, otherwise known as the smart phone. They are everywhere. Anywhere one looks, a person staring at their smart phone will be encountered. Walk down a busy city street and try to find someone that makes eye contact; you are more likely to literally run into somebody walking toward you so engrossed in their smart phone world that their walking is slow, automatic, and inattentive. This applies to people of all ages.

Text neck is a Modern age term coined to describe repeated stress injury and pain in the neck resulting from excessive watching or texting on hand held devices over a sustained period of time.^[1] It is also often known as Turtle Neck posture. It is a cause for increasing concern especially with children given their greater propensity to mobile phone usage.^[2] Recent figures have shown that around 87% of teenagers (14-18 years) in USA and 79% teenagers (12-15 years) in UK own and use smartphones. Among adults 92% and 95% (18-34 years) reported

owning a smartphone in USA and Australia respectively.^[3]

The research, by New York Spine Surgeon Dr Kenneth Hansraj, scientifically proves the health impact of bending your head down to peer at a mobile device – an increasingly common health problem becoming known as 'text neck

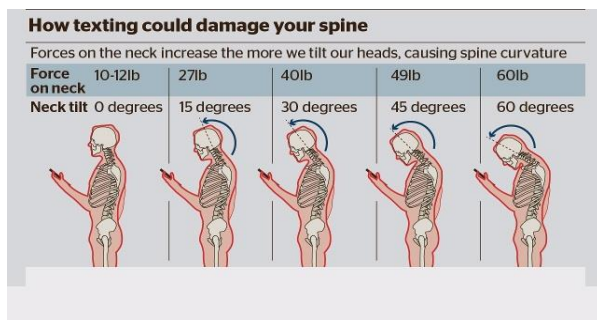
The term 'Text Neck' was coined by Dr. DL Fishman, a US chiropractor. This condition is a growing lifestyle and health Condition with the constant growth in mobile user population all over the world. Apart from neck pain, it can also cause shoulder pain, upper back pain, headaches and increased thoracic kyphosis.^[1]

People's contemporary lifestyle has become much dominated by computer technology; often overuse in digital tasks on handheld mobile technology induces 'Text Neck' ^{7,8} seemingly a world-wide health effect. The term of 'text neck', or another phrase 'turtle neck posture', can be described as a repeated stress injury and pain sustained from excessive watching or texting on

handheld devices for long periods of time^{9,10} Text neck may cause many harmful symptoms such as neck pain, shoulder pain, upper back pain, chronic headaches and increased curvature of the spine¹¹ Mobile device users frequently adopt prolonged forward head posture while looking down at the screens of mobile devices¹² Text neck directly affects the spine while flexing the head forward at varying degrees - when the head tilts forward at 15 degrees, the forces on the neck surge to 27 pounds, at 30 degrees 40 pounds, at 45 degrees 49 pounds and at 60 degrees 60 pounds, then at 90 degrees the model prediction was not reliable^{7,8} This issue is a major concern with children, since their heads are larger in relation to their body size than adults, and thus they are have an increased risk for text neck given their propensity to use mobile phones. 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

Flexing the head forward to use a smartphone affects the spine directly. Tilting the head forward to 15 degrees places about 27 pounds of force on the neck. This increases to 40 pounds at 30 degrees, 49 pounds at 45 degrees and 60 pounds at 60 degrees. Damage caused by untreated text neck can be similar to occupational overuse syndrome or repetitive stress/strain injury.^[4]



The most common presentation of Text Neck is neck pain, stiffness and soreness. The main symptoms include^[1]

Stiff neck: soreness and difficulty in moving the neck is usually present when trying to move the neck after long usages

Pain: can be localized to one spot or may be diffused over an area, usually lower part of the neck. Can be described as dull aching or can also be sharp or stabbing in extreme cases

Radiating pain: there can often be radiation of pain into the shoulders and arms.

- Muscular weakness: shoulders muscles namely, trapezius, rhomboids and shoulder external rotators are often weak
- Headache: sub-occipital muscle tightness can lead to tension type headaches.
- Text neck most commonly causes neck pain and soreness. In addition, looking down at your cell phone too much each day can lead to:
- Upper back pain ranging from a chronic, nagging pain to sharp, severe upper back muscle spasms.
- Shoulder pain and tightness, possibly resulting in painful shoulder muscle spasm.
- If a cervical nerve becomes pinched, pain and possibly neurological symptoms can radiate down your arm and into your hand.⁶

In addition to these common symptoms there can also be:

- Flattening of thoracic kyphosis
- Early onset arthritis
- Spinal degeneration
- Disc compression
- Muscle weakness
- Loss of lung capacity

Management

Prevention is the key when it comes to Text-Neck. Following suggestions should be kept in mind while using smartphones or other hand held devices:^[3]

1. Avoid excessive usage and take frequent breaks
2. Avoid prolonged static postures
3. Position the device such that it reduces stresses both on the head/neck and the upper extremities
4. Avoid high repetitions of movements such as prolonged typing or swiping
5. Avoid holding large or heavy devices in one hand for long duration

Rehabilitation is found to be very effective in treating the stress injury resulting from Text Neck. Rehabilitation can be designed as a 2-4 week program starting with soft tissue mobilization, Grade 1 and 2 joint mobilization, active and passive stretches of tight muscles and progressing to muscle strengthening, posture retraining and home exercise program.^[5]

In acute cases, pain relief is the main goal. It can be achieved by

- Regular neck movements: rotations and side bending

- Simple neck and shoulder stretches are also important to improve blood flow and relieve tension, for example: Stretches to Keep the Neck Healthy-
- Tuck the chin down toward the neck, then slowly raise it up toward the ceiling.
- Rotate the head so that it is looking out over one shoulder, then turn slowly and rotate in the other direction.
- Rotate the shoulders in a clockwise direction while holding the arms down by the sides of the body; repeat in a counter clockwise direction

Stretches: trapezius and levator

Chin tuck exercises

Ice/heat packs

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

- **Adjustments to Prevent Neck Pain While Texting**
- **Raise the phone.** Move the cell phone (and other devices) to eye level so the head doesn't have to be tilted.
- **Take frequent breaks.** Spend some time away from the phone—or any type of head-forward posture. Change positions when texting—lying on one's back is an excellent way to relieve pressure on the neck.
- **Stand up straight.** 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 extreme chronic cases pain medication, injection into the facet joint or trigger point or acupuncture can be done.^[1]

Conclusion – Text Neck is affects neck posture due to excessive use of Smart phones in wrong posture.

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