



REVIEW ON “TECH NECK” SYNDROME

**Shivani K. Mokate, Pradnya J. Raut, Nupur B. Thite,
Akshada S. Pokale, Prajakta A. Shelke**

Student,

Department of Pharmacology,
SCSSS’s Sitabai Thite Collage of Pharmacy, Shirur, Pune, India

Abstract

Neck pain is a prevalent health problem, largely reported in adult patients. However, very recent data show that new technologies are inducing a shift in the prevalence of this relevant issue from adulthood to all of the pediatric ages. In fact, the precocious and inappropriate use of personal computers and especially cell phones might be related to the development of a complex cluster of clinical symptoms commonly defined as “tech neck syndrome”. The purpose of this article is to address the new phenomenon of the “tech neck syndrome”, the underlying causes and risk factors of musculoskeletal pain, that can be modified by changes in routine life, in different cultures and habits, and on the “tech neck syndrome” as increased stresses on the cervical spine, that can lead to cervical degeneration along with other developmental, medical, psychological, and social complications.

Keywords

- Neck pain
- tech neck
- causes
- effects
- treatment
- conclusion

Introduction

skin on the neck is much thinner than that of the face, which also means there are fewer skin appendages like sweat or oil glands and hair, making it drier and more prone to wrinkling, “Neck skin is a continuation of facial skin. If you’re neglecting it, it will age faster even as your face continues to look youthful.”

There is no surprise that most people today have a smart phone, a laptop and even a tablet. These electronic devices have become an integral part of our daily lives! Even though they are very useful and most of us wouldn’t be able to work without them anymore, these small gadgets have their share of downsides, including a posture that is too often tilted forward, in a position that is not natural for humans. Not only are neck and shoulder pain becoming more and more prevalent, we are also noticing the appearance of new deep horizontal lines in this same area: the “tech neck lines”.

The word “**tech**” indicate technology.

What is tech neck:

The term “Tech Neck” has been part of the vocabulary of healthcare professionals. The tech neck is a condition associated with the neck region where horizontal lines or wrinkles are seen on the neck . And this lines indicates the sign of the early aging. Also in this neck pain is also their This is due to the bad posture during the using of electronic gadgets like smartphones, computers, tablets etc ‘Tech neck’ isn’t just a problem for people from an esthetic standpoint, either. Long hours hunched over our gadgets means that we can also start to experience pain in the neck and shoulder region. This can lead to muscular and postural issues that may need the assistance of a physiotherapist

Reason behind tech neck:

The skin on our neck is particularly delicate and is constantly fighting against gravity as we move our heads around in daily life. The result of this is often the loss of volume in the underlying tissues. Genetics, sun exposure, excessive smoking and drinking, weight fluctuations, and even hormonal changes can all play a role in the change of texture in your skin. There are two types of neck wrinkles — horizontal and vertical. Vertical neck creases are usually caused by sleeping in certain positions for a long period of time and are mostly genetic, while horizontal creases usually occur from a myriad of factors including loss of collagen production, sun and environmental damage, and keeping the neck flexed forwards for long periods of time, for example, while looking at your phone, furiously scrolling on social media.

“Lines around our necks are largely hereditary, but repetitive movements anywhere can increase the possibility of lines and wrinkles,” However, according to some experts there are still cynical about the idea that neck wrinkles are becoming more prominent purely because of our use of technology

The rise in selfie culture means that people are scrutinising themselves much more than they did in the past. Social media certainly contributes to a desire to improve physical appearance. I believe this trend is more to blame for the rise in “tech neck” as people are noticing their wrinkles more than they did in the past. Even babies are born with neck wrinkles, so it’s unlikely that they are caused by our use of tech.”

Effects of tech neck :

1. STRUCTURAL 1BACK AND NECK PROBLEMS

As your posture becomes worse, the muscles of your upper back stretch out, and the muscles in the front of your body start to become weaker, your neck inches forward and your head feels 10 pounds heavier. Tech neck not only causes structural back and neck problems, it can also create panic and breathing problems. Staying in a forward-rolled posture can impact your breathing profoundly.

2. STRAINS YOUR NECK

Using your computer or smartphone all day can cause extra neck strain. A forward head position will cause your muscles to overstretch behind your neck, and the muscles in the front will shorten excessively. Not only is this the place most individuals hold their stress, but it can also contribute to neck soreness, discomfort and pain.

3. SHOULDER PAIN

On top of the pain in your neck from texting on your smartphone, you may also **experience shoulder pain**. Since smartphones are small, many individuals tend to hunch their shoulders to hold their smartphone in one hand so they can text with the other. Incorrect ergonomics while you sit in front of your computer can also cause you to hunch over your keyboard. You need to stretch your shoulders out to give them a break periodically and practice forward and backward shoulder rolls.

4. HEADACHES

You could also experience headaches, either from having your head forward over your shoulders too far while you read your computer monitor or from tilting your head down to read your cell phone's display. Either of these positions will over-balance your head and could trigger headaches. Instead, try lifting your phone at eye level and adjusting your seat so you're sitting upright and you're at eye level with your computer monitor.

5. STIFFNESS

Inflammation and stress of your connective tissues and neck muscles can cause stiffening or hardening of tissues and limit the rotation in your neck.

6. SPINE WEAR AND TEAR

The more people continue relying on their handheld electronic devices, the more it harms their postural health as they shift in their default "head down" posture repeatedly every day for long periods. It can cause long-term cervical spine wear and tear and degeneration. It could also cause the need for spine surgery.

7. LONG-TERM EFFECTS

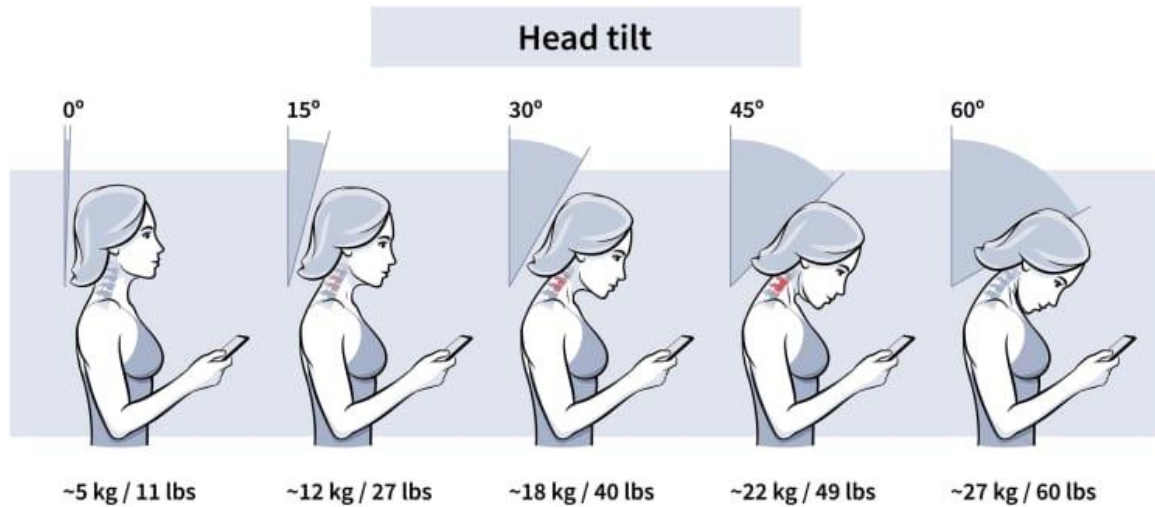
You could experience long-term effects, such as:

- Tension headaches
- Herniated discs in your cervical spine
- Neck sprains, similar to injury from whiplash

What initially happens is that your muscles have to strain to hold up your head. When your muscles tighten, it adds more pressure on your discs, making them wear out more quickly. Your weakened discs could then bulge or even rupture. If a ruptured disc pinches one of your nerves, you could experience weakness, pain or numbness in your arm that could require surgical treatment.

8. ABNORMAL CURVATURE

The forward bending of looking at your screen, if left unchecked, could become permanent. You could develop an irreversible hunch-backed appearance.



Pressure on neck



Treatment:

1) Massage:

Often employed after applying ice or heat, a massage can soothe muscle tension and spasm, reducing pain.

2) Better posture:

If poor posture is causing the neck pain, then simple changes might be the solution. This could include changing a workstation to become more ergonomically friendly, with a chair, monitor, mobile phones, and keyboard positioned in ways to keep the body, head and neck more aligned in a natural position; or learning to sleep on the back (instead of the stomach or side) with an ergonomically friendly pillow and mattress.

3) Physical therapy:

Most treatment programs usually include some form of physical therapy to improve neck strength and flexibility. The physical therapy programs' structure and length will vary depending on the specific diagnosis and situation. In the beginning, the person will typically have multiple sessions per week with a trained physical therapist, and then in time will progress to performing the prescribed exercises at home.

4) Over-the-counter medications:

Many over-the-counter pain relievers are available to either reduce inflammation or hinder pain signals from reaching the brain. However, these drugs must be used with caution. Read the pain reliever's entire label for directions and warnings, and be careful not to overdose. For example, the active drug in Tylenol is acetaminophen, which is also found in many other common drugs, such as cold and allergy medications.

5) Prescription pain medications:

If an over-the-counter pain reliever hasn't been effective, prescription-strength medications may be tried. Many pain medications are available, and each has its own potential risks and benefits. While opioids have commonly been prescribed for pain relief in the past, the CDC changed its guidelines in 2016 and recommends fewer opioid prescriptions for chronic pain management due to the risk for addiction and other possible complications.

6) Acupuncture:

With its roots in Chinese medicine from thousands of years ago, acupuncture involves placing thin needles into the body at key points based on the condition being treated. A typical treatment might last less than an hour before the needles are removed. In the US, the needles must be disposed and not reused. It's important that the acupuncturist is licensed and uses sterile needles. Acupuncture is usually well-tolerated by most patients and is generally considered safe. In addition to the above treatments, anything the individual can do to lead a healthy life will also positively impact neck pain. For example, moderate aerobic activity several times each week, and stopping smoking, can be beneficial for most types of neck problems.

CONCLUSION:

As a text neck is a repetitive stress injury, it can be easily relieved or prevented by taking frequent breaks from the mobile device, like every 20 min or so. You should constantly look up and bring the neck back into its original neutral position.

Other alternatives are to hold the mobiles/electronic devices higher, so that it is alignment with the eyes and the stress on the neck muscles is reduced. Doing posture focused exercises, such as Pilates and yoga, which aim is gaining the right posture, will reduce the stress on the neck and shoulder. These exercises will increase the awareness of the way the mobile devices are used and should be used. There are some simple lifestyle changes which greatly help in alleviating the muscular pain and discomfort of the text neck before the condition worsens. A person can make some simple changes in his/her daily posture and lifestyle to make him/her feel better. Taking frequent breaks helps in relieving the stress on neck and shoulders. As stated in the review smart phone induced neck pain and associated problems are of chronic progressive nature, timely interpretation and interventions along with good knowledge about postural correction will be the key entities to deal with Text Neck Syndrome. Further clinical trials recommending the effectiveness of current practice will be of great use in designing an evidence based protocol.

REFERENCES:

<https://link.springer.com/article/10.1007/s00266-022-03071-7>

<https://images.app.goo.gl/KeggaNoeud3j8EEc9>

<https://www.dazeddigital.com/beauty/article/44495/1/rise-tech-neck-looking-phone-neck-wrinkles>

<https://www.instyle.com/beauty/skin/how-get-rid-of-neck-lines>

<https://onlinelibrary.wiley.com/doi/full/10.1111/jocd.15497>

<https://www.elle.com/beauty/news/a43443/neck-wrinkles-phone-posture/>

