

# De Quervain Disease

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**Abstract:** *Whatsapp is a cross- platform instant messaging service for mobile devices that relies on the internet for the transmission of messages. This article highlights the health related issues of excessive use of whatsapp. De Quervain disease is also called as Whsappitis or tenosynovitis of the first dorsal compartment of the wrist. It is a painful inflammation of tendon in wrist and lower thumb. It is caused by a direct blow to the thumb, gaming and over use of thumb and wrist. This can be prevented and treated by avoiding repeated motions and pinching moves with the fingers and thumb.*

**Keywords:** De Quervain Disease, tenosynovitis, Finkelstein Test

## 1. Introduction

The world is ever changing due to the advancement in the realm of science and technology. These days it seems hard to escape the presence of technology. Most people will praise the many technological gadgets that they use in their everyday lives. Many of us depend on it to get us through the day, to do our job, to get around, and to find certain things. Technology is evolving at a very fast rate, and what most people did not even think could be real a few years ago, is now becoming a reality. Whatsapp is one of the changes in technology that is commonly used on specific mobile phones and computers. Since the Smart phones became popular, many messaging services were launched but Whatsapp has become very popular among them<sup>3</sup>.

Whatsapp has grown by 30% over the past 24 months. App Annie report reveals that WhatsApp is now more popular than Facebook, by Rounak Jain Jan. In its “ State of mobile Apps 2019” report analytics firm App Annie has reported that WhatsApp crossed Facebook to become the social media giant’s most popular app in September 2018. In January 2018, Facebook CEO Mark Zuckerberg had revealed that WhatsApp had over 1.5 billion active users in India a number which might have increased considerably in the last 12 months<sup>7</sup>

Dr Aashish Chaudhry, Managing Director and Orthopaedic Surgeon, Aakash Healthcare Super Speciality Hospital, stated that Excessive addiction to social media and the use of smart phones along with it can be bad for bones and joints. Tilting the head forward for prolonged times forces the neck muscles, ligaments and tendons to strain. This distinct posture has been labelled as text neck. Orthopaedicians are noticing signs of premature degeneration of the spine in people, who are very young, because of this.

Dr Ishwar Bohra, Sr. Consultant, Orthopaedics, Joint Reconstruction & Spine Surgery, BLK Super Speciality Hospital, said that prolonged use of smart phones can increase neck and upper back pain as well. Text neck, which was not heard of a decade ago, is a strain injury that is the result of hunching over smart phones while texting. Text neck has become quite common among people, especially with the rise of the use of smart phones. Even in adolescents and teens suffer from problems related to muscle pain in the shoulders and neck, sometimes in the lower back as well.

Prolonged use of gadgets for social media platforms can cause an ill effect on bones and joints. It can lead to weakness in hand muscles, multiple tendon inflammation (tenosynovitis) nerve compression (carpal tunnel syndrome & cubical tunnel syndrome) and chronic neck pain (Cervical spondylitis)<sup>4</sup>.

‘Smart phones Pinky’ – a perceived bend in the little finger on one’s dominant hand – may occur in people who use the device for at least six hours a day, the Sydney Morning Herald reported. “Although the chances of a person permanently bending their finger through smart phone use are ‘pretty slim’, it would take a minimum of around six hours a day of applied force on soft tissue to evoke change,” Dave Parsons, clinical fellow at Curtin University in Australia, was quoted as saying<sup>6</sup>.

According to The Lancet, a 34 year old emergency medicine physician who was pregnant, she had bilateral wrist pain with sudden onset upon waking up one morning. She had no history of trauma and had not engaged in any excessive physical activity in the previous days. Hands examination revealed discomfort upon bilateral palpation of the radial styloid and mobilisation of the thumb. Physical examination was negative for Phalen's sign and Tinel's sign but positive for Finkelstein's sign. Because of the patient's pregnancy, x-rays were not taken to rule out rhizarthrosis. The diagnosis was bilateral extensor pollicis longus tendinitis of the thumb.

The patient was on duty on December 24(Christmas Eve), and the following day, she responded to messages that had been sent to her on her smartphone via WhatsApp instant messaging service. She held her mobile phone that weighed 130g, for 6 h. During this time she made continuous movements with both thumbs to send messages. The diagnosis for the bilateral wrist pain was Whsappitis<sup>2</sup>.

## 2. Definition

“De quervain disease”, is also called as Whsappitis or stenosing tenosynovitis of the first dorsal compartment of the wrist.

It’s a painful inflammation of tendons in the wrist and lower thumb. When the swollen tendons rub against the narrow tunnel they pass through, it causes pain at the base of your thumb and into the lower arm.

**Etiology**

- A direct blow to the thumb
- Gaming
- Hobbies like gardening or racket sports
- Inflammatory conditions like rheumatoid arthritis
- Overuse of thumb and wrist.
- Repetitive workplace tasks

**Risk Factors:**

- **Age:** Adults between 30 and 50 are most likely to get it.
- **Gender:** Women are 8 to 10 times more likely to get it than men.
- **Motherhood:** It often happens just after pregnancy. Lifting your little bundle of joy repeatedly might bring it on.
- **Motions:** You can get the condition if you move your wrist over and over again, whether it's for fun or for work.

**Signs and Symptoms**

- Pain near the base of the thumb
- Swelling near the base of the thumb
- Difficulty in moving the thumb and wrist while doing something that involves grasping or pinching
- A "sticking" or "stop-and-go" sensation in the thumb when moving it.
- Spasms
- Tenderness
- Squeaking sound as the tendons move within the swollen sheaths
- Occasional burning sensation in the hand<sup>9</sup>.

**Home remedies and lifestyle changes:**

- Ice the area to ease inflammation.
- Stop doing anything that makes it worse. Avoid repeated motions and pinching moves with the fingers and thumb.
- Wear the splint as long as the doctor tells.
- Keep doing exercises<sup>8</sup>.

**Diagnosis:**

- History Collection
- Physical Examination
- X- Ray
- Finkelstein Test.

**Treatment:**

NSAID

Corticosteroid injections

Supportive thumb spica splinting

Abstinence from repeated use of thumb and wrist( using of mobiles)

Physical therapy<sup>1</sup>**Prevention:**

- Avoid repetitive movements
- Change the actions to reduce the stress on the wrists
- Take frequent breaks to rest the wrists
- Wear a brace or splint on the thumb and wrist, if necessary.
- Follow the exercise routine suggested by the doctor or physical therapist<sup>5</sup>.

**3. Conclusion**

Though tenosynovitis was initially reported in children in 1990 due to injuries associated with video games. Social media giant, "Whatsapp" addiction now seen in adults. Tenosynovitis caused by texting with mobile phones could well be an emerging disease. Physicians need to be careful of these new disorders.

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