



## ***ELONGATED STYLOID PROCESS-A CASE REPORT***

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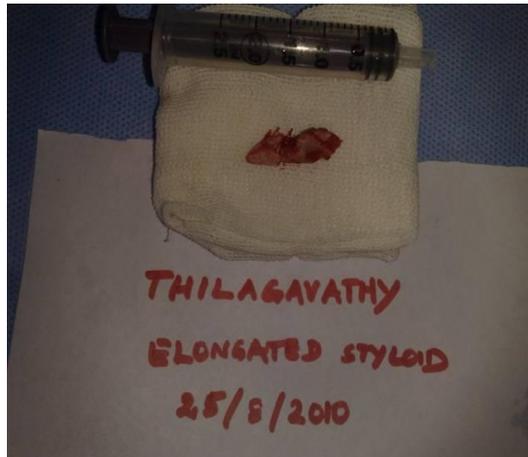
### **ABSTRACT:**

Elongated styloid process occur in 4 % of the general population, while only a small percentage of these patients are symptomatic. The normal adult styloid process length is considered to be between 20mm to 30mm. The longest recorded elongated styloid process so far that caused symptoms and hence underwent surgery was around 6.3cms though in an adult human dry skull upto 8cms have been recorded<sup>(2)</sup>. We would like to present a case of an elongated styloid process measured 6.5cms which could be the longest recorded styloid process in world literature. A 45 years old female patient presented with persistent pain in the throat even after tonsillectomy done 4 years before. An elongated styloid process was diagnosed and was removed by transoral approach following which the patient was relieved from her symptoms

### **CASE REPORT:**

A 45 years old female patient came with chief complaints of persistent pain in the throat that is in the left tonsillar fossa which gets aggravated on turning the head. She had undergone tonsillectomy 4 years before for recurrent throat pain. On clinical examination the elongated styloid process was palpated on the left tonsillar fossa. As the pain was persistent even after the surgery, radiological evaluations were made which revealed an elongated styloid process on the right side. Through an transoral approach the styloid process was removed which measured 6.5cms. This could be the longest recorded elongated styloid process recorded in the world literature in a live subject. Following surgery the patient was totally relieved of her symptoms.





### DISCUSSION:

Styloid process of temporal bone is a slender projection attached to base of skull and the styloidhyoid apparatus extends from the tip of the styloid process, the stylohyoid ligament passes downwards and forwards to the lesser cornu of the hyoid bone. All these structures are derived from second branchial arch cartilage<sup>(3)</sup>. Eagle defined the length of a normal styloid process at 2.5 to 3 cms. The normal length of styloid process varies greatly. An elongated styloid process occurs in 4% of general population which only small percentage (between 4 to 10.3%) of these patients are symptomatic. The styloid process and the styloidhyoid ligament have been linked to Eagle's syndrome which has a symptomatology characterized by the sensation of having a foreign body in the pharynx, causing difficult and painful swallowing and earache. It has been referred to as styloid syndrome, stylalgia, stylohyoid disorder, neuralgia of styloid process, cervicopharyngeal pain syndrome. Thot et al stressed that length in isolation is not a risk factor but that its combination with increased acuity in deviation from norm, both anteriorly and medially makes elongated styloid process the sole cause of Eagle syndrome<sup>(1)</sup>. Diagnosis can be made by digital palpation of the styloid process in the tonsillar fossa<sup>(6)</sup>.

Diagnosis can be confirmed by imaging studies. Lateral view radiographs of the skull can be taken, but the disadvantage of this view is the overlapping between styloid processes of the

both sides and with adjoining bone structures. An anteroposterior view radiograph should be taken to determine whether the styloid process is medially or laterally deviated. Orthopantomogram shows the entire length of the process distinctly and its deviation can also be made out clearly. CT scanning is extremely valuable tool. Treatment of symptomatic elongated styloid process includes both medical and surgical therapy<sup>(5)</sup>.

Medical management includes the following analgesics, anticonvulsants, antidepressants, local infiltration with steroids or long acting local anesthetic agents. Two surgical approaches to styloidectomy are the intraoral approach or (Transpharyngeal) and the extraoral approach<sup>(5)</sup>.

Main surgical complications associated with styloidectomy are deep space neck infection, injury to main neurovascular structures, haemorrhage, temporary alterations of speech and swallowing, injury of the facial nerve.

### CONCLUSION:

Elongated styloid process is a diagnosis that should be considered in the evaluation of recurrent neck, throat or facial pain and dysphagia with or without radiation of pain to the ipsilateral ear<sup>(2)</sup>.

Eagle's syndrome though the incidence is 4 to 7%, it is largely under diagnosed. A thorough clinical and radiological examination will reveal impending insult. Proper diagnosis can definitely be of immense help to rationalize the line of management and the ultimate clinical outcome<sup>(5)</sup>.

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