

Fothergill Disease Wincing Facial Pain or Toothache: Incidence of Tooth extraction in Fothergill Disease

FAUZIA SAJJAD,¹ REHAN SHAHID,² NABEEL CHAUDHARY¹
 Mukhtiar Ahmed,¹ Imran Mirza,¹ Mohammad Akmal,¹ Naveed Ashraf³
¹Department of Neurosurgery, PGMI / Lahore General Hospital
²Punjab Institute of Cardiology, ³Jinnah Hospital, Lahore – Pakistan

ABSTRACT

Background: Fothergill Disease commonly cause pain in jaws. Here, incidence of unnecessary tooth extraction and simple dental treatment was noted while managing this disease, is presented.

Methods: A prospective review of 30 consecutive patients was done, who were treated for Fothergill disease at Department of Neurosurgery, PGMI / Lahore General Hospital Lahore from 2012 to 2013. The clinical presentation, dental surgeon evaluation, simple dental procedures and tooth extractions, were noted and analyzed.

Results: In this study, thirty Fothergill disease patients were identified in 18 females (60%) and 12 males (40%) patients, with a mean age at diagnosis of 56.0 years. Right facial pain was relatively more common in 17 (56.66%) patients. Lower jaw was involved more alone in (n = 6) with upper jaw in (n = 12). Despite the typical nature of facial pain a large no of patients (n = 12) 40%, visited dental surgeons. Simple dental procedures in the form of local injections or root canal was done in (n = 5), while tooth extracted in (n = 7)

Conclusions: All peridental area pain are not due to dental disease, Exact diagnosis and treatment of jaw pain is mandatory to avoid unnecessary dental treatment.

Keywords: Facial Pain, dental pain, tooth extraction.

INTRODUCTION

Fothergill disease or tic dolouroux is excruciating, electric shock like, intermittent throbbing pain in one or more division of trigeminal nerve on one half of face. It mainly affects lower face and jaw, although can cause pain around nose and above eye.¹⁻³

Trigeminal nerve is the 5th cranial nerve for sensation to face. Word Trigeminal derived from Latin words TRIA and GEMINUS meaning three and twin. As trigeminal nerve divided into three divisions when it leaves the brain. Irritation of trigeminal nerve cause TRIGEMINAL NEURALGIA.⁴

Almost 1.5 million people diagnosed as having TGN every year. It's a disease of old age mainly after 50 years of. More common in females than in males. Mostly tic dolouroux is due to misfire from nerve as a result of contact of nerve with a vessel or any space

occupying lesion or in MS.^{5,6}

Trigeminal neuralgia can be typical classic sharp shooting pain, triggered by touching any area of skin or any specific activity. Atypical pain presents as constant burning sensation affecting wider facial area. TGN tends to run in cycles. There are periods of remissions in between the pain.^{7,8}

The diagnosis of TGN is clinical. Radiological imaging seldom revealed the exact reason of irritation of nerve, unless TGN is due to MS or by space occupying lesion.⁹

TGN is mostly experienced along upper and lower jaw so people assumes that the pain is from dental source. It's the utmost responsibility of dentist to exactly diagnose the nature of pain and to avoid unnecessary dental procedures. Many times the dental caries may be incidental finding.

OBJECTIVES

To highlight the importance of exact diagnosis of facial pain, for unnecessary dental procedures and tooth extraction.

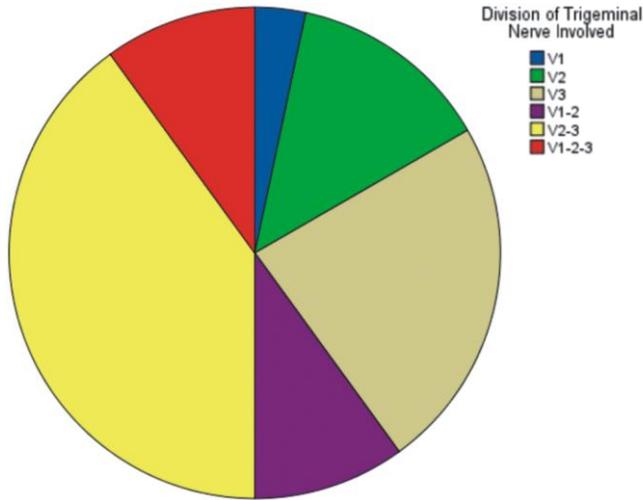


Fig. 1:

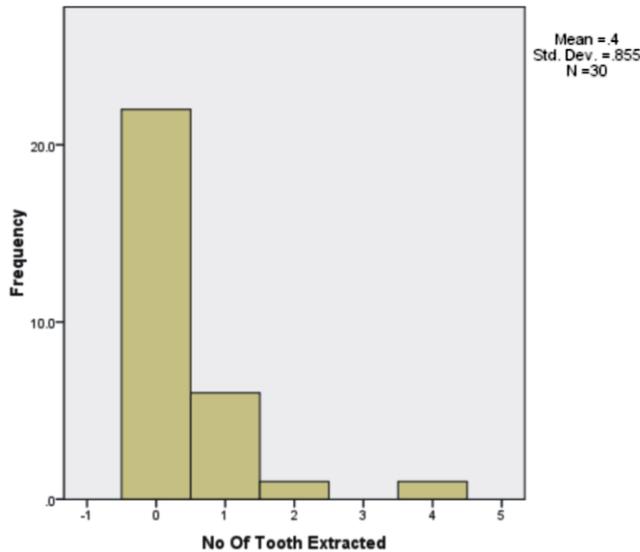


Fig. 2:

MATERIALS AND METHODS

After obtaining approval from the ORA (Office of research affairs), a prospective study was done to identify 30 consecutive patients treated for Fothergill Disease from 2012 to 2013. The clinical information including age, gender, presenting symptoms, medical history, side of face involved, division of trigeminal

nerve involved, previous dental consultation due to this facial pain, any dental procedure or tooth extraction by dentist due to this disease was analyzed. Statistical analysis of data was done using SPSS version 17. All the variables were identified. Demographic variables of the patients were analyzed using simple descriptive statistics. Mean and Standard deviation were calculated for age n no of tooth extracted. Frequency and percentages were determined for qualitative variables i.e. gender, side of face and division of nerve involved, dental consultation, simple dental procedures and tooth extraction.

RESULTS

Thirty Fothergill disease patients were identified in 18 female (60%) and 12 male (40%) patients, with a mean age at diagnosis of 56.0 (range 35 - 73) years. Fothergill disease presented as a severe intermittent current like pain mainly in lower face, individual involvement of lower jaw mandibular division in (n = 7). Maxillary division or upper jaw involved in (n = 4). Many patients presented with both upper and lower jaw pain, or involvement of both maxillary n mandibular division (n = 12). Right facial pain was relatively more common in 17 (56.66%) patients. Despite the typical nature of facial pain a large no of patients (n = 12) 40%, visited dental surgeons. Unfortunately many of them underwent simple dental procedures in the form of local injections or root canal (n = 5), while few very unlucky extracted their tooth (n = 7). Mainly they extracted one tooth before visiting neurosurgeon for definitive treatment. One patient extracted 2 teeth and most unlucky patient extracted four teeth before diagnosis of tic dolouroux.

DISCUSSION

Pain in teeth and peridental area is mostly of dental origin. However as the TGN can cause pain in jaws so frequently TGN patients visits dental surgeons and received unnecessary treatment.

In our setup, mostly the people are illiterate. Lack of education and poor socioeconomic status as well as bad cultural habits of eating beetals n tobacco leads to worst oral hygiene. Moreover the pain in peridental area further restricts cleaning, brushing and flossing.¹⁰ No custom of regular dental care here. All these factors lead to extremely poor dental hygiene.¹¹

We conducted a study on surgical management of trigeminal neuralgia, while collecting data it was

realized that most of the patients before arrival to neurosurgeon visited dentist for sharp shooting facial pain. We collected all information about their dentist appointment dental procedures and tooth extraction. Our main aim is to highlight the importance of exact diagnosis of trigeminal neuralgia to avoid unnecessary dental treatment.

In our study we found that mostly TGN is affecting females comparable to all literature available.¹² We found right facial pain more prevalent same as documented by Raskin.¹³ Lower half of face was involved in most of the patients almost all the literature documented the same.^{2,3,14}

In our study 12 (40%) patients visited dentist and underwent dental procedures including tooth extraction. Although all the patients have very classical tic douloureux. Basically pain has considerable impact on quality of life.¹⁵ The unpredictable episodic pain forces patient to adopt unpredictable life style. Severe sharp shooting pain is not tolerable by patients and they want to get rid of that even they are ready to sacrifice their teeth. After failure of dental treatment finally they reached to neurosurgeons for appropriate management.

Fothergill disease is initially managed by medical therapy. No of excellent drugs are available in the market in the form of carbamazepine, oxycarbamazepine, baclofen, and gabapentine. Surgical treatment reserved after medical treatment fails or toxicity to medication developed.¹⁶⁻¹⁹ Surgical treatment may be in form of neurectomy or injection in peripheral nerve. Mechano – compression, glycerol rhizotomy or radio-frequency rhizotomy of ganglion. Microvascular decompression of root entry zone in cerebellopontine angle is the treatment of choice in most of the cases. Stereotactic radiosurgery is another option of treating Fothergill disease.²⁰⁻²⁶

Simply to treat Fothergill disease is not difficult but yes its exact and timely diagnosis is important. Awareness of disease is not only recommended for public as well as for dentist.

CONCLUSION

All peridental area pain are not due to dental disease, Exact diagnosis n treatment of jaw pain is mandatory to avoid unnecessary dental treatment.

Address for Correspondence:

Dr. Fauzia Sajjad

Department of Neurosurgery, PGMI / Lahore General

*Hospital, Lahore p – Pakistan
Email: drfauziasajjad@hotmail.com*

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AUTHORS DATA

Name	Post	Institution	E-mail
Dr. Fauzia Sajjad	Assistant Professor	Department of Neurosurgery, PGMI / Lahore General Hospital	drfauziasajjad@hotmail.com
Dr. Nabeel Chaudhary	Senior Registrar		
Dr. Mukhtiar Ahmed	Senior Registrar		
Dr. Imran Mirza	SMO		
Dr. Mohammad Akmal	Assistant Professor		
Dr. Rehan Shahid	Assistant Professor	Punjab Institute of Cardiology	
Prof. Dr. Naveed Ashraf	Professor	Jinnah Hospital, Lahore – Pakistan	