

# 19<sup>th</sup> American Dental Congress

December 08-10, 2016 Phoenix, USA

## Failure of eruption of permanent molars: A diagnostic dilemma

Geetanjali Sharma, Louise Kneafsey, Paul Ashley and Joseph Noar  
UCLH Eastman Dental Hospital, UK

**Background:** There are limited studies that have proposed various protocols for the management of failure of eruption (FOE) of permanent molars with no clear consensus or guideline. Accurate diagnosis of FOE is challenging but key for successful management.

**Purpose:** The aim of our research was to confirm key diagnostic criteria that will aid diagnostic differentiation between Primary failure of eruption (PFE) and Mechanical failure of eruption (MFE) of permanent molars and identify successful management strategies.

**Methods:** This was a retrospective descriptive study. Patients diagnosed with FOE of permanent molars (excluding impaction) between January 2003 and December 2013 was identified. A data collection sheet was used to record patient details, clinical and radiological features of failure of eruption. Two examiners (GS, LK) independently analyzed the data and a diagnosis of PFE or MFE was made based on a combination of current protocols. Management strategies for each were identified and reported as satisfactory/unsatisfactory.

**Results:** A total of 31 patients met the inclusion criteria of which 15 were classified as PFE and 14 with MFE. 1 patient was too young to confirm diagnosis, 1 patient had delayed eruption. 26% of cases were misdiagnosed or prematurely diagnosed as MFE, which led to unsuccessful orthodontic management.

**Conclusion:** In our paper we propose a management protocol based on the results of this study coupled with existing protocols in the form of a simple flow diagram to aid accurate diagnosis and management of this rare and challenging clinical problem.

## Biography

Geetanjali Sharma has completed her undergraduate dental training in 2006 from Queen Mary and Westfield College, University of London, thereafter, she entered the Specialist Postgraduate Program in Orthodontics and attained her MOrth (RCS, England), MclnDent (Orthodontics) and FDS (RCS). She is currently working as a Consultant Orthodontist at Chelsea and Westminster NHS Trust, London and teaches/supervises postgraduate orthodontic students at Eastman Dental Hospital, UCLH, London.

[geetanjali.sharma@hotmail.co.uk](mailto:geetanjali.sharma@hotmail.co.uk)

## Notes: