Giornale Italiano di Endodonzia (2015) **29**, 9—29

Disponibile online all'indirizzo www.sciencedirect.com

ScienceDirect

journal homepage: www.elsevier.com/locate/gie

CASE REPORT/CASO CLINICO

CONGRESSO INTERNAZIONALE PARMA 2014 VINCITORE PREMIO GIORGIO LAVAGNOLI

Operating protocols of external root cervical resorption

Protocollo operativo nei riassorbimenti radicolari cervicali esterni

Luca Venuti *

libero professionista

KEYWORDS
external cervical resorption;
clinical procedures;
accurate isolation.

Abstract
Aim: Theme of this report is the external cervical root resorption and the sequence of clinical procedures to be implemented during the phases of treatment.

The external cervical root resorption (ICR) presents particular pathological conditions such as to classify between resorption of inflammatory origin.[1—3] It is generally presented as a complex clinical situation both in the diagnosis in a predictable prognosis.[3—6] It's often associated with loss of calcified tissue: dentin, cementum, alveolar bone. Often during the treatment the pulp vitality is compromised.[4—11] The etiological factors are vague and not closely associated with the onset of the disease. Prevention is often impossible and treatment modalities not so simple, highly dependent on the location and severity of the injury.[2,3]

Key points to get a favorable prognosis of elements with the processes of resorption are: early detection, accurate removal of tissue resorption, endodontic and restorative phases with accurate isolation of the operative field.

In the early stages of treatment it is advisable to look for: the specific etiological factor (bleaching, trauma, previous surgery, etc.), the severity of the lesion (extension submarginal, infraosseus; the possible compromise of the vitality of the pulp by means of diagnostic vitality tests.[12,13]

A large part of the cervical resorption is not associated with endodontic problems. A conservative approach without sacrificing the vitality of the pulp is then desirable.[8] Cleansing with irrigation endodontic solutions (sodium ipocloroite and clorexidine) can prevent future endodontic diseases.[14]

* Corresponding author at: Via Jussi 79, San Lazzaro di Savena (BO) 40068. Tel.: +051 321489; fax: +051 326170.
E-mail: lucavenuti@fastwebnet.it.

Peer review under responsibility of Società Italiana di Endodonzia.

Production and hosting by Elsevier

http://dx.doi.org/10.1016/j.gien.2015.05.005

The report highlighted the importance of therapeutic procedures designed to preserve as much healthy tooth tissue as possible, respect the 'biological width periodontal, restorative procedures conservative observing a strict isolation of the operating field in order to implement the correct adhesive techniques. Case reports show an operating sequence that respects the anatomical substrates can be considered effective and predictable.

Methodology: Considering the diagnostic moment as the basic starting point, the phases of treatment include: an immediate surgical exposure of the portion of the root under resorption, the complete removal of tissue resorption and regularization of cavity margins, possible pulp protection or isolation of the endodontitic space, before apply restorative procedures, isolation of the operative field, direct composite restoration of the root portion reabsorbed, following endodontic therapy and restoration the chamber portion with further control of the total removal of tissue resorption.

In clinical cases presented the operative sequence are common and consists of:

1st appointment:

surgical exposure of the lesion with sulcular full thickness mucogingival flap incision, extensions mesial and distal of at least one element.

Full exposure of the lesion resorption (possible osteotomy and remodeling of periodontal structrue surrounding the lesion), mechanical debridement with tungsten carbide ball burs mounted on blue ring contrangle. If necessary staining with methylene blue tissue involved dentine reabsorbed for proper evaluation of tissue infiltration. Cleansing with chlorhexidine the cavity. Pulpotomy if necessary and medication with temporary sealing the endodontic space with Cavit. Mounting the rubber dam in open flap condition in order to obtain correct adhesive procedures to make a definitive restoration. Three passage adesive system is used. Microibrid composite material, such as flow materials can be stratify to make the restoration. Suspended suture at the end of the finishing and polishing procedure.

2nd appointment

Suture removal, root canal therapy if necessary.

In case of endodontic treatment is carried out by the pulp chamber open a further controls the infiltrate resorption in order to eliminate all the infiltrated tissue.

Final direct restoration with all adesive procedure made under rubber dum protection.

To avoid traumatic fractures is recommended indirect composite restoration for elements severely compromised.

Results and discussion: The work presented may not have seen the value of scientific research skimpiness of treated cases and the short time of clinical observation.

The suggested protocol presented tends to immediately assess the prognostic ability of the item being resorpted and suggests a conservative maintaining of the element, in order to don't waste time and money in elements whose prognosis is still uncertain. Composite restorations with adhesive technique performed under the dam show excellent behavior also inside the gingival sulcus.

It is therefore considered an excellent opportunity to evaluate therapeutic procedure (periodontal treatment, endodontic, restorative) in two sessions teeth that would otherwise rapidly fall in fatal prognosis.

Unfortunately, ICR is normally not detected in its early stages and/or is often misdiagnosed. By the time it is discovered, the resorptive process is advanced enough to be at least a Class 2 or worse. Fortunately, ICR is not a very common occurrence in an endodontic practice, though it can be quite demanding of our time. Some Class 2 ICR cases and all Class 3 and Class 4 cases, with rare exception, will involve conventional endodontic treatment.

Conclusions: State the primary conclusions of the study and their implications. Suggest areas for further research, if appropriate.

PAROLE CHIAVE
riassorbimento cervicale esterno;
procedure cliniche;
accurato isolamento.

Obiettivi

Tema di questa breve relazione è il riassorbimento radicolare cervicale esterno (ICR) e la sequenza delle procedure cliniche da attuare durante le fasi di trattamento.

Il riassorbimento radicolare cervicale esterno presenta particolari condizioni patologiche tali da classificarlo tra i riassorbimenti di origine infiammatoria.[1—3] Generalmente si presenta come una situazione clinica complessa sia nella diagnosi che in una predicibile prognosi,[3—6] il suo decorso è associato perdita di tessuto calcificato: dentina, cemento