Fifth class cavities are very common in the population, and they seem to become more and more frequent, thus becoming a relevant topic to clinicians and a problem for a lot of patients.

The number of patients who have experienced Cervical Tissue Loss (CTL) is, in fact, growing and the incidence has shown a continuous increase over the years.

The CTL can involve hard tissues and soft tissues: this situation requires a multidisciplinary approach using a combined restorative and periodontal treatment.

It is really important to start with a proper etiologic diagnosis. The main causes for CTL:

Acids: this category embraces all forms of chemical, biochemical and electrochemical degradation.

Abrasion: Toothbrush / toothpaste action

Abfraction: microfracture of tooth substance in areas of stress concentration.

Because of the complex interaction of these various mechanisms, it is generally incorrect to designate all CTLs as being caused by only one mechanism. The clinician should consider all etiological and modifying factors before completing the diagnosis or initiating treatment if indicated.

The restoration of CTL is a big challenge for clinicians and adhesive materials, due the biomechanical aspects, the type of substrate available for the adhesion and the isolation of the operative field.

One of the problems could be the isolation: the Lesion can be so cervical that the difference between the buccal/lingual and
the vestibular level of the healthy tooth can make the placing of the rubber dam really difficult or almost impossible using a clamp. The situation is different if we manage the isolation of the operative field using a dedicated instrument capable of acting, at the same time, as a gentle rubber-dam and as a soft tissues retractor, useful to expose the working area.
A) Clamp in place: if the lesion is not big and not deep cervical the working angle is correct.

B) If the lesion is deep cervical it is possible to modify the clamp to reach the healthy tissue, but the working angle will allow only a really flat restoration and may require a lot of finishing and polishing at the end.

C) To maintain a good working angle the clamp could damage the buccal gum.

D) The solution is to use a Gengiva instrument able to push the rubber dam and compress the gum only from the vestibular side.
Fig. 3  Working angle in deep cervical lesion using a clamp.
Fig. 4  Working angle in deep cervical lesion using LM Gengiva.

Fig. 5  The blue plastic working ends available in three sizes, can tightly adapt to the gingival margin in different teeth, and make the gum protection and retraction easy.
Fig. 6 Deep cervical lesion.
Deep cervical lesion using Gengiva.

The goal is to obtain a proper emergence angle of the restoration.
It is the proper instrument to isolate this lesion. Advantages of this technique are: Easy exposure of healthy tissue, if the access to the margin is clear, it will be easier to model the 5th class restoration, resulting less finishing and polishing time, and less hard and soft tissue damage. The fast and atraumatic procedure minimize the post-operative discomfort for the patient. Disadvantages: The instrument has to be hold in place by the operator’s hand during the procedure time.
Fig. 10

A) pre-operative image.
B) Gengiva try in.
C) Gengiva and rubber dam in place.
Sometimes it is necessary to adapt the plastic working end.

Step by step
Fig. 12 Pre-operative view
1) LM Gengiva in place, to test the gum compression, gently air spray to evaluate the sensitivity. If the patient refers discomfort go for anesthesia; if the patient refers no thermal sensitivity or discomfort it is possible to proceed without anesthesia.

If the blue plastic working end is too wide, could prevent correct adaptation of the rubber dam.
Use a disc to reshape the blue plastic working end.
Tooth side pre-adhesive procedures: enamel bevel to achieve the best aesthetic result. Margin definition important especially in cases of not big cavities not to miss the restoration limit it is a very gentle sign. Healthy tissue reactivation, to expose “fresh tissue” and remove the sclerotic one.

It is important to fully drag the dam with Gengiva, finding the correct angle.
Fig. 18  
Air-spray glycine to clean the operative area
Selective etching and adhesive procedures.

Composite stratification, from the incisal to the cervical surface following Closing Gap strategy (Style Italiano – Work in progress)
Finishing
Finish and polish with rubber dam in place, using Kavo Eva handpiece (reciprocating-action instrumentation) bevel tips, scaler and silicone rubber-based composite finishing instruments.
One week later

Only enamel lesion, start from cleaning the surface by sonic handpiece and glycine air spray
Gengiva small size. Sandblast with aluminum dioxide 27 micron particles using air and water spray handpiece, then etch.
Fig. 28 On the left surface post etching. On the right Universal adhesive.

Fig. 29
Achieving a good emergence profile in 5th class restorations can be simple. This technique helps to always use the rubber dam in 5th class restoration, to have a correct shape with the minimum need of finishing procedures; to obtain the correct emergence angle of the reconstruction and avoid flat restorations. The best gum healing process is usually associated with restorations that correctly reproduce the lost anatomy of the tooth: the anatomy is usually "curvy", using Gengiva it is possible to have a proper working angle; having an open angle is important to mold the restoration emergence profile.