The present invention relates to a scalpel for a dental surgery. In the present invention, a blade is formed in such a manner that a holder is connected to a rear portion, and a front end and lower end are formed of an edge of a blade, and in the blade, a holder assembly portion is formed in a flat shape, and an end portion of the same is formed in a semicircular concave shape in a longitudinal direction of the same, and an end portion of the semicircular concave shaped portion is formed in an arc shape, and all circumferences of the arc portion are formed of an edge of blade, so that it is possible to easily cut a circumference portion of a certain tooth based on a semicircular concave portion of the blade.
SCALPEL FOR DENTAL SURGERY

TECHNICAL FIELD

The present invention relates to a scalpel for a dental surgery, and in particular to a scalpel for a dental surgery which is capable of effectively pulling out a tooth by cutting a certain portion in a gum along a circumference of a tooth when performing a dental surgical operation in a dental surgery.

BACKGROUND ART

Generally, a scalpel for a dental surgery among various devices used for a dental surgical operation is adapted to cut a certain tissue like a gum. As shown in Figure 1, a conventional scalpel for a dental surgery will be described.

The conventional scalpel for a dental surgery includes a holder B formed of various kinds of blades A or in combination with the above blades A. An assembling groove "a" is formed in each blade. A protrusion portion "b" is formed in the holder B. When a certain blade is assembled to the holder B, the protrusion portion "b" and the assembling groove "a" are integrally engaged each other.

In addition, in the above conventional scalpel for a dental surgery, the shapes of the blades are different depending on the form of lateral face. Namely, the blades are basically shaped in a straight line blade A1, a hatched shape blade A2, and a curve shape blade A3. The above various shapes of the blades are
selectively used based on whether the portions to be operated are externally exposed to a line of teeth or the potions or internally exposed to a line of teeth and based on the shapes of teeth to be operated.

In the above conventional blades, the blades A are different in the shapes like a straight line blade A1, a hatched shape blade A2, and a curve shape blade A3 depending on the contour when laterally viewing the same. However, when viewing the above blades on the plane, the blades are all straight line shapes.

Namely, in the conventional blades, the edges are fabricated in a flat shape, and then the edges are further processed in a straight shape, hatched shape and curve shape thereby forming a certain shaped blade. Namely, a blade is formed in a straight line portion, hatched portion and curve portion.

In a conventional method for pulling out a tooth, after putting a patient under anesthesia, a certain tooth is pulled out, since the portion from which the tooth is pulled-out is large, it takes a long time for recovery of the above portion.

In addition, the tooth is generally formed in a column shape. In the case that an operation is performed for cutting a gum along a circumference of a tooth, when a conventional scalpel is used, as shown in Figure 2, the holder B held by a hand becomes an operation point, and the tooth portion becomes a support point. Therefore, an end portion of the blade A penetrating into a gum broadens the cut portion, so that a cut portion is heavily formed in the gum.
DETAILED DESCRIPTION OF THE PRESENT INVENTION

Accordingly, it is an object of the present invention to provide a scalpel for a dental surgery which overcomes the problems encountered in the conventional art.

It is another object of the present invention to provide a scalpel for a dental surgery which is capable of implementing a proper cutting operation by cutting a gum along column shaped teeth by forming a blade in a concave shape in an end portion of the same.

It is further another object of the present invention to provide pulling out a tooth by simply cutting a gum using the above blade when pulling out a certain tooth thereby minimizing the size of a cut portion.

In order to achieve the above objects, there is provided a scalpel for a dental surgery in which a blade is formed in such a manner that a holder is connected to a rear portion, and a front end and lower end are formed of an edge of a blade, and in the blade 10, a holder assembly portion 12 is formed in a flat shape, and an end portion 13 of the same is formed in a semicircular concave shape in a longitudinal direction of the same, and an end portion of the semicircular concave shaped portion is formed in an arc shape, and all circumferences of the arc portion are formed of an edge of blade, so that it is possible to easily cut a circumference portion of a certain tooth based on a semicircular concave portion of the blade.
BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will become better understood with reference to the accompanying drawings which are given only by way of illustration and thus are not limitative of the present invention, wherein;

Figure 1 is a view illustrating a conventional scalpel for a dental surgery;

Figure 2 is a plane view illustrating a state of use of a conventional scalpel for a dental surgery;

Figure 3 is a perspective view illustrating a scalpel for a dental surgery according to the present invention;

Figure 4 is a front cross sectional view and a plane cross sectional view of a scalpel for a dental surgery of Figure 3 according to the present invention;

Figure 5 is a plane view illustrating a state of use of a scalpel for a dental surgery according to the present invention; and

Figure 6 is a view illustrating another example of a scalpel for a dental surgery according to the present invention.

<Description of major elements of the drawing>

10: blade 11: semicircular protrusion
12: holder insertion portion 13: end portion
B: holder
PREFERRED EMBODIMENTS OF THE PRESENT INVENTION

The preferred embodiments of the present invention will be described with reference to the accompanying drawings.

Figure 3 is a perspective view illustrating a blade according to the present invention, and figure 4 is a cross-sectional view of Figure 3.

As shown therein, in a blade 10 according to the present invention, the construction that a holder B is connected to an end portion is same as the conventional art. In the present invention, an edge is improved.

In the above blade 10, a holder assembling portion 12 is formed in a flat shape in the same manner as the conventional art. The peripheral portions of the edges of the end portion 13 are formed in a semicircular concave shape along a longitudinal portion as shown in the front and plane views of Figure 4. An end portion of the semicircular concave portion is formed in an arc shape for thereby implementing an easier cutting operation in a circumference of a corresponding tooth.

In addition, in another embodiment of the present invention, an end portion of the blade may be formed in an arc shape, and then an arc shaped protrusion 11 may be further formed in the center portion of the same. Therefore, when cutting a circumference of the tooth by processing the edges of the blade, the semicircular protrusion portion 11 comes to a root portion of a tooth for thereby implementing
an effective operation.

In the above scalpel for a dental surgery according to the present invention, when cutting a circumference of a tooth, as shown in Figure 6, it is possible to perform a surgical operation without broadening the cut portions.

Namely, since the edge portions of the blade 10 are formed in a concave cylindrical shape, when using the blade 10 in an upright shape, the concave portion is closely contacted with a circumference of a column shaped tooth. In the above state, a cutting operation is performed in the left and right directions, so that it is possible to effectively perform a cutting operation in a state that the blade is closely contacted with the tooth.

In the blade 10 according to the present invention, the operation direction of the edges of the blade which is formed in a circular shape is defined in a direction that the blade is closely contacted with a circumference of the tooth when the cutting operation is performed in the left and right directions, so that the size of the cut portion is minimized.

In addition, in the case that a semicircular shaped protrusion 11 is formed in an end portion of the blade, when cutting a circumference of a certain tooth, the semicircular protrusion 11 comes to a root portion of the tooth. Therefore, when performing a cutting operation up to the root of the tooth, it is possible to automatically pull out a certain tooth based on a simple cutting operation.

The scalpel for a dental surgery according to the present invention is not
limited to only a straight line shaped blade. The scalpel for a dental surgery according to the present invention may be adapted to a hatched line shape blade and a curve shaped blade.

As described above, in the blade according to the present invention, when a cutting operation is performed along a circumference of a tooth, the cutting operation is performed along a portion most near a corresponding tooth based on a concave shaped end portion of the blade for thereby minimizing the size of a cut portion. In addition, in the present invention, an end portion of the arc portion of the blade is capable of cutting at a certain depth, and the cutting operation is performed up to a circumference of a root of a tooth by a semicircular protrusion portion. Therefore, it is possible to effectively perform a tooth pulling-out operation.

Therefore, the operator is capable of more easily performing a tooth pulling-out operation. The patient has a smaller size of cut portion for thereby decreasing the bleeding amount of blood. The pain is minimized, and the recovery time is significantly decreased.

As the present invention may be embodied in several forms without departing from the spirit or essential characteristics thereof, it should also be understood that the above-described examples are not limited by any of the details of the foregoing description, unless otherwise specified, but rather should be construed broadly within its spirit and scope as defined in the appended claims, and therefore all changes and modifications that fall within the meets and bounds
of the claims, or equivalences of such meets and bounds are therefore intended to be embraced by the appended claims.
What is claimed is:

1. A scalpel for a dental surgery in which a blade is formed in such a manner that a holder is connected to a rear portion, and a front end and lower end are formed of an edge of a blade, and in the blade 10, a holder assembly portion 12 is formed in a flat shape, and an end portion 13 of the same is formed in a semicircular concave shape in a longitudinal direction of the same, and an end portion of the semicircular concave shaped portion is formed in an arc shape, and all circumferences of the arc portion are formed of an edge of blade, thereby easily cutting a circumference portion of a certain tooth based on a semicircular concave portion of the blade.

2. The scalpel of claim 1, wherein said blade 10 is formed in an arc shape in its end portion, and a semicircular protrusion 11 is formed in an intermediate portion of the same, and an edge portion of the same is processed, so that when cutting a circumference of a tooth, the semicircular protrusion 11 comes to a root portion of the tooth.
A. CLASSIFICATION OF SUBJECT MATTER

IPC7 A61C 3/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 A61B 1/00, A61B 17/32, A61C 3/00, A61C 3/02, A61C 5/04

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Patents and Applications for inventions since 1975
Japanese Utility models and Applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

NPS, PAJ, FPD, USP

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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Further documents are listed in the continuation of Box C. See patent family annex.

Date of the actual completion of the international search

15 MARCH 2003 (15.03.2003)

Date of mailing of the international search report

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Telephone No. 82-42-481-5578

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