CLAIMS

1. A device (10; 10”) for use in the treatment of hemorrhoids, said device comprising:

an elongated tube-shaped element (12; 12”) comprising a forward end (13; 13”) and an aft end (14; 14”), said aft end is open such that the interior of the tube-shaped element is accessible via the aft end, said tube-shaped element is extending along a longitudinal axis L and comprises at least one opening (15; 15”) formed between the forward and aft end; and

an anal mucosa support device (20; 20”) removably arranged within the tube shape element, said support device is, when arranged in the tube-shaped element, exposed in the opening and comprises at least two cavities (23, 24) for the anal mucosa arranged along the longitudinal axis L,

wherein at least one needle guide structure is formed in the elongated tube-shaped element and the anal mucosa support device such that at least one needle (100; 1001”; 1002”) is guided during movement within the tube shaped element from an extracted position in which the needle is arranged outside the opening in the elongated tube-shaped element across the at least two cavities in the anal mocusa support device to a position where the needle extend across the opening in the tube-shaped element, and wherein the device comprises a sealing plug (50) arranged to close and seal the open aft end of the device and a connection with access to the interior of the tube shaped element, said connection being intended to be connected to pumping means such that the pressure within the tube shaped element could be reduced and the anal mocusa sucked into the at least two cavities.

2. Device according to claim 1, characterized in that the at least one needle is moved from the extracted position to the position where the needle

extend across the opening in the tube-shaped element parallel to the longitudinal axis L.

3. Device according to claim 1 or claim 2, characterized in that the at least one needle guide structure comprises at least one needle passage (25; 251”; 252”) arranged in the opening in the elongated tube-shaped element to guide the at least one needle during movement from the extracted position to the position where the needle extend across the opening in the tube-shaped element.

4. Device according to any one of the previous claims, characterized in that the at least one needle guide structure comprises at least one needle guide element (101) arranged in the elongated tube-shaped element on either side of the opening in the tube shaped element to guide the needle.

5. Device according to claim 3 or claim 4, characterized in that the at least one needle passage is formed in the contact surface between the elongated tube-shaped element and the anal mucosa support device such that the at least one needle passage is opened when the anal mucosa support device is removed from the elongated tube-shaped element.

6. Device according to claim 3 or claim 4, characterized in that the anal mucosa support device comprises at least a first (21) and a second (22) elongated part extending substantially parallel to axis L, said first and second part are arranged adjacent to each other and the at least one needle passage (25) formed in the contact surface between the first and second elongated part such that the at least one needle passage is opened when the first and second elongated part are separated from each other.

7. Device according to claim 3 or claim 4, comprising two needle guide structures formed in the elongated tube-shaped element and the anal

mucosa support device such that two needles (1001”; 1002”) are guided during movement within the tube shaped element from an extracted position in which the needles are arranged outside the opening in the elongated tube-shaped element across the at least two cavities in the anal mocusa support device to a position where the needles extend across the opening in the tube-shaped element.

8. Device according to claim 7, characterized in that the anal mucosa support device comprises a first (21”), a second (22”) and an intermediate (215”) elongated part extending substantially parallel to axis L, said first and second part are arranged on opposite sides of the intermediate part adjacent to the intermediate part such that a first needle passage (251”) is formed in the contact surface between the first part and the intermediate part, and a second needle passage (252”) is formed in the contact surface between the intermediate part and the second elongated part such that the two needle passages are opened when the first, second and intermediate elongated part are separated from each other.

9. Device according to claim 7 or claim 8, wherein the two needle guide structures are arranged to guide the two needles substantially parallell from the extracted position in which the needles are arranged outside the opening in the elongated tube-shaped element across the at least two cavities in the anal mocusa support device to the position where the needles extend across the opening in the tube-shaped element.

10. Device according to any one of the previous claims, characterized in that the tube shaped element is divided into at least a forward and a rear part and said forward part is removably attached to the rear part.

11. Device according to claim 1, characterized in that the sealing plug (50) comprises the connection (51) intended to be connected to pumping means.

12. Device according to claim 1, characterized in that the device comprises a handle (16) extending in substantially radial direction from the longitudinal axis L from the aft end of the tube shaped element and the connection with access to the interior of the tube shaped element is arranged in the handle.

13. Device according to any one of claims 1 to 12, characterized in that the at least two cavities in the anal mucosa support device comprises a bottom structure (26) and the distance in radial direction from axis L between the centre of the needle passage (25) and the bottom structure (26) is between 2 and 12 mm.

14. Device according to claim 13, characterized in that the bottom structure comprises at least one opening (27) in each cavity such that the anal mucosa is sucked into the at least two cavities.

15. Device according to any one of claims 1 to 9, characterized in that the at least two cavities in the anal mocusa support device comprises a bottom structure, and the cavitiy (24) arranged in the forward end of the anal mucosa support device along axis L have a larger distance in radial direction from axis L between the centre of the needle passage and the bottom structure than the at least one other cavity.

16. Device according to any one of the previous claims, characterized in that the anal mucosa support device is maintained in the intended position within the tube-shaped element by a removable locking element (30) arranged within the tube shaped element to force the anal mucosa support device into the intended position with the two cavities exposed in the opening of the tube-shaped element.

17. Device according to claim 16, characterized in that the locking element is forming a bottom structure (26) in the cavities in the anal mucosa support device.

18. Device according to any one of the previous claims, comprising at least one closing element (40) removably arranged in the tube-shaped element to close the at least one opening in the tube-shaped element and facilitate insertion of the device.

19. Device according to claim 16, characterized in that the closing element has a shape corresponding to the shape of the tube-shaped element.