Claims

1. An embolic protection device (1) for inserting into an aortic arch, (9), comprising a filtering unit (2) and a feeding unit (4), wherein

– the filtering unit (2) comprises a frame (3) and a filter mesh (20) and the filter mesh (20) is arranged on the frame (3),

– the filtering unit (2) has a proximal area (6) and a distal area (7),

wherein the filtering unit (2) is designed in such a way that it can, at least partially, be positioned in the aortic arch (9).

2. The embolic protection device (1) in accordance with Claim 1, characterised in that the filtering unit (2) is divided into two sections in such a way that the proximal area (6) and the distal area (7) each have their own frame (27, 28).

3. The embolic protection device (1) in accordance with Claim 1 or 2, characterised in that, when the filtering unit (2) is appropriately positioned, haptic or visual feedback is generated, which signals the final position to the user.

4. The embolic protection device (1) in accordance with one of Claims 1 to 3, characterised in that the proximal frame (27) and the distal frame (28) comprise two respective ends in the proximal area (6), which extend in parallel to one another in the interior of the frame (3) and/or are arranged standing perpendicularly to the frame, and are connected with the feeding unit (4).

5. The embolic protection device (1) in accordance with one of Claims 1 to 4, characterised in that the distal and proximal areas (6) possess an anchorage (16), designed in such a way that the radial rigidity is increased.

6. The embolic protection device (1) in accordance with one of Claims 1 to 5, characterised in that the frame ends along, as well as perpendicular to, the direction of flow, can be bent.

7. The embolic protection device (1) in accordance with one of Claims 1 to 6, characterised in that the frame ends and/or the sides of the frames can be given an angle of between 5° and 85°, preferably 25° to 75°, especially preferably 60° in the direction of flow and/or perpendicularly to it.

8. The embolic protection device (1) in accordance with one of Claims 1 to 7, characterised in that the filtering unit (2) is divided into two sections, in such a way that the proximal area (6) can be actively and/or passively collapsed, independently of the distal area (7), when the embolic protection device (1) is removed.

9. The embolic protection device (1) in accordance with one of Claims 1 to 8, characterised in that, via a device (23) which is connected with the filter mesh (20) and/or with the proximal frame (27), the proximal area (6) can be actively collapsed in the direction of the feeder vessel (11).

10. The embolic protection device (1), in particular in accordance with one of Claims 1 to 9, characterised in that a respective independent filter (29,30) is stretched over both frames (27, 28).

11. The embolic protection device (1), in particular in accordance with one of Claims 1 to 10, characterised in that the filtering unit (2) is divided into two sections in such a way that the proximal area (6) and the distal area (7) each possess their own frame (27, 28), and that a single filter (31) expands over both frames.

12. A handle (5) for a medical device, in particular an embolic protection device (1), in particular in accordance with one of Claims 1 to 11, characterised in that the handle (5) comprises a first connecting piece (36), a handle shell (37), a slide (38) and/or a second connecting piece (39).

13. The handle (5) in accordance with Claim 12, characterised in that the first connecting piece (36) is designed in such a way that a connection that is to be actively secured to a catheter can be produced.

14. The handle (5) in accordance with one of Claims 12 to 13, characterised in that the connecting piece (36) has notches (42) on the inside, into which the blades (40) of the catheter (12) can be inserted.

15. The handle (5) in accordance with one of Claims 12 to 14, characterised in that, by means of the second connecting piece (39), a reversible clamp connection to the feeding unit (4) can be produced.

16. The handle (5) in accordance with one of Claims 12 to 15, characterised in that the slide (38) is designed in such a way that it can exert a tractive and/or compression mechanism for loading and positioning devices.

17. The handle (5) in accordance with one of Claims 12 to 16, characterised in that the slide (38) has a locking device for anchorage, which makes the relative position of the slide in relation to the handle shell (37) possible.

18. The handle (5) in accordance with one of Claims 12 to 17 characterised in that the handle (5) contains a haemostatic valve.

19. The handle in accordance with one of Claims 12 to 18 characterised in that the handle shell (37) has an interior guide tube, which can be inserted into the slide (38).

20. The system consisting of an embolic protection device (1) in accordance with one of Claims 1 to 11 and a catheter (12).

21. The system consisting of an embolic protection device (1) in accordance with one of Claims 1 to 11, a handle (5) in accordance with one of Claims 12 to 19 and a catheter (12).

22. The system consisting of a handle (5) in accordance with one of Claims 12 to 19 and a catheter (12).

23. The system consisting of an embolic protection device (1) in accordance with one of Claims 1 to 11 and a handle (5) in accordance with one of Claims 12 to 19.

24. The method for using an embolic protection device in accordance with one of Claims 1 to 11.

25. The method for using a handle (5) in accordance with one of Claims 12 to 19.

26. The method for using a system consisting of an embolic protection device in accordance with one of Claims 1 to 11 and/or a handle (5) in accordance with one of Claims 12 to 19 and/or a catheter (12).