

TITLE OF INVENTION: LIGATION DEVICE CAPABLE OF AUTOMATICALLY CUTTING LIGATURE WIRE

ABSTRACT

A ligation device capable of automatically cutting a ligature wire, the ligation device comprising a front handle (1), a rear-section handle (2), a catheter assembly, a snare (3) and a ligature wire (4), wherein one end of the catheter assembly is connected to the front handle (1), the snare (3) is arranged at the other end of the catheter assembly, and a slit is provided in the inner side of the snare (3); a ligature wire (4) passes through the front handle (1) and the catheter assembly; one end of the ligature wire (4) is connected to the rear-section handle (2), and the other end of the ligature wire (4) is a wire loop (41) that is retractable in the forward direction and stops in the reverse direction; the wire loop (41) is pre-assembled in the snare (3); a ligature wire cutting assembly is provided in the rear-section handle (2); and when the rear-section handle (2) is separated from the front handle (1) and is pulled backwards, the ligature wire (4) is pulled backwards, such that the wire loop (41) is pulled out of the slit to the inner side of the snare (3) and retracts, and when the ligature wire (4) is pulled backwards to reach a preset tension, the ligature wire cutting assembly automatically cuts the ligature wire (4). A ligation operation is achieved by means of pulling a rear-section handle (2) backwards, and automatic ligature wire cutting is performed at a preset node by means of the ligature wire cutting assembly during the operation process without needing to rely on the visual estimation and hand perception of an operating surgeon and thus the problem of manual operation failure or errors is avoided.

FIG. 3