Malleable Sheath Body

Abstract

A blood pump assembly includes an introducer sheath with a proximal end and a distal end, a pump body which extends within the introducer sheath, and a catheter that interfaces with the pump body and extends proximally though the introducer sheath. In a rest state, the introducer sheath forms an oval cross-section sized to encompass the catheter and a medical device. In a constrained state when the pump body is within the introducer sheath, the cross-section of the introducer sheath is circular. The malleability of the introducer sheath allows larger medical devices to be passed through the introducer sheath, while still allowing other devices to be inserted through the introducer sheath after the pump has been guided through. A perimeter of oval cross-section of the introducer sheath is equal to the perimeter of the circular cross-section of the introducer sheath.

[Fig. 1A, 1B & 1C]