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**Ultrasound Guided Insertion of Bi-Caval Dual Lumen Catheter for Venovenous Extracorporeal Membrane Oxygenation**

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**Introduction**

The new Avalon Elite® Bi-Caval Dual Lumen Catheter is the first single kit venovenous ECMO cannula licensed for infants, children and adults.

It is designed to increase the efficiency of blood gas exchange by simultaneously removing desaturated blood from both the superior vena cava (SVC) and the inferior vena cava (IVC) and returning reoxygenated blood to the right atrium.

Proper positioning of the Bi-Caval Dual lumen ECMO cannula is imperative for optimal circuit function. Imaging is therefore mandatory during cannulation.

**Methods**

The Bi-Caval Dual Lumen ECMO cannula is placed using the Seldinger technique from the right internal jugular vein. It is the first ECMO cannula which must be placed into the IVC and have the reinfusion port positioned in the right atrium. Image guided placement is therefore essential.

**Results**

The Bi-Caval Dual Lumen single kit venovenous ECMO cannula has been used in our institution in 71 Neonates, 13 Children and 183 Adults

**Conclusion**

Echocardiography has been most effectively used and is our method of first choice for dual lumen ECMO cannula placement in newborns and in the emergency setting when there is not time to move the patient to the operating room for fluoroscopy.

Fluoroscopy is the best imaging modality in larger children and adults.