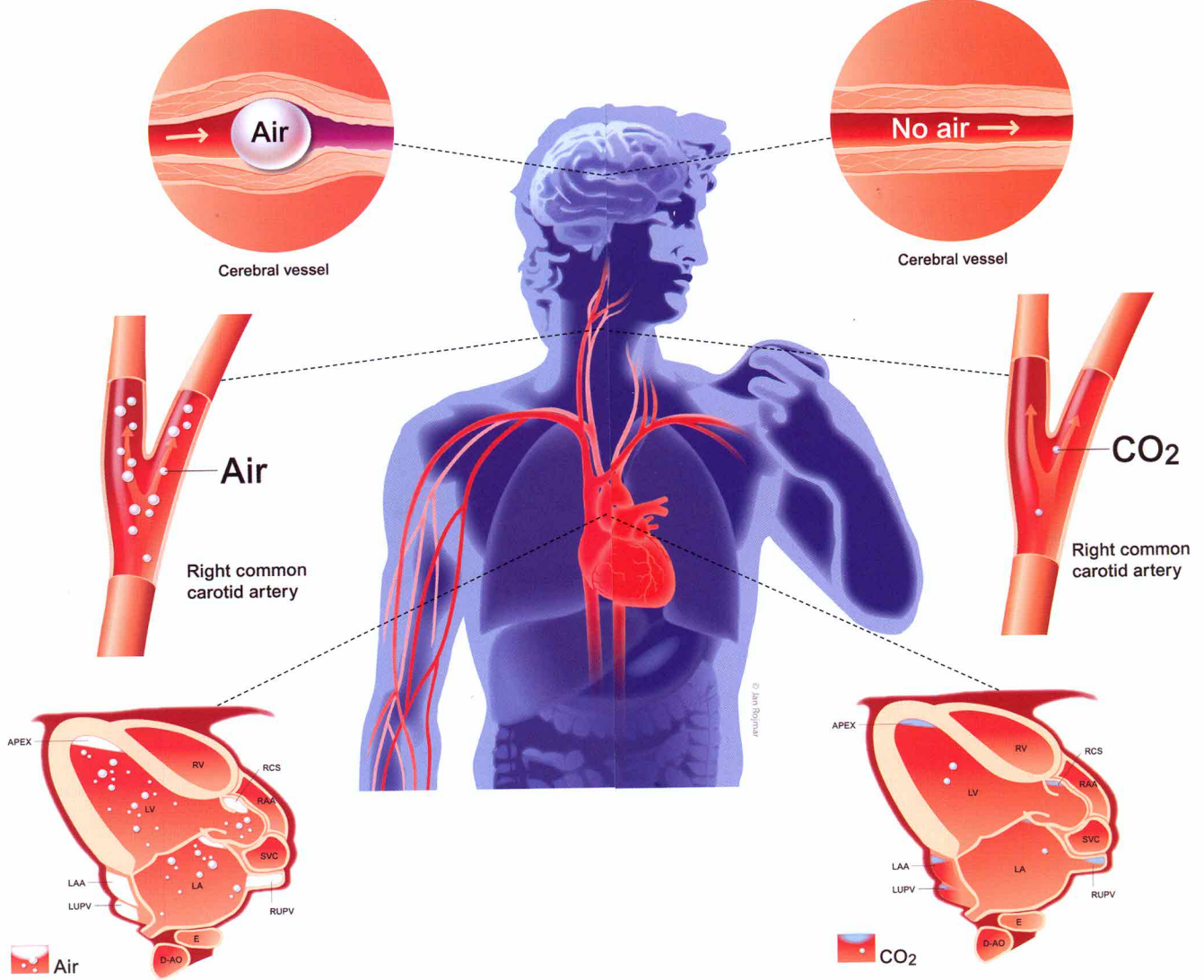


Prevent air embolism during open-heart surgery

Incomplete de-airing

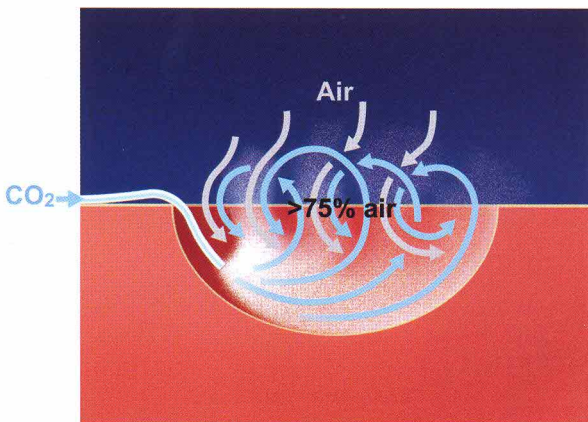
Complete de-airing



CarbonAid[®]
&
CarbonMini[™]

Avoid turbulence!

Less effective de-airing devices create turbulence even at low CO₂ flows. This results in a continuous mix with the surrounding atmosphere and a high percentage of air will still be present in the thoracic cavity. Turbulence makes de-airing impossible.



As long as air is present there is a risk for air embolism! Even air bubbles as small as 25 µl obstructing cerebral arterioles for less than 30 seconds cause an impaired cerebral function⁹.

**Complete de-airing
is achieved with**

**CarbonAid®
&
CarbonMini™!**

The superiority of the Cardia Innovation CO₂ diffuser technology

The **CarbonAid®** and **CarbonMini™** can deliver a high CO₂ gas flow without any turbulence^{2,3,6,7} and as a result of this create a 100% CO₂ atmosphere inside the thoracic wound area. This prevents air embolism from occurring.



- When CO₂ is insufflated with a laminar flow a protective cushion is built up^{1,5}.
- The continuous overflow of CO₂ will repel and transport away small particles, this decreases the rate of airborne contamination^{1,5}.
- A bacteriostatic effect of CO₂¹.

