

Great innovations In cardiology 14-15 October 2010 Torino - Italy



CPSI: CARMECI ANTONELLO

Edwards SAPIEN transcatheter Heart Valve

Crimping Process for the Transapical Procedure





Azienda ospedaliero universitaria San Giovanni Battista di Torino s.c. cardiologia 2 emodinamica

CERTIFICATE OF ACHIEVEMENT

Presented to Mr. Antonino Carmeci

in recognition of the successful completion of Edwards SAPIEN[™] valve and device preparation training for Transcatheter Heart Valve procedure

TRANSAPICAL & TRANSFEMORAL CERTIFIED

life is now

October 2009



Edwards

Matpleym

131/8/2010 Nathalie Freys

Edwards SAPIEN transcatheter Heart Valve



Edwards SAPIEN transcatheter Heart Valve



Composizione del kit per l'impianto transapicale





0100CP26 CP23







IM

Crimping table (1,30m) for a Transapical procedure



Flush Sheath Introducer (26Fr.) & Dilator







Flush the Ascendra Delivery system





JMC

Insert the Guidewire (Standard 1,50m) into the Ascendrea Delivery System



Insert first the Distal flexible end of the wire

Straight proximal end of the wire must be outside

Crimp Balloon Preparation

- Attach the stopcock to the Inflation
 Lumen
- Attach the Inflation Syringe (25cc) to the Stopcock and a 10 cc syringe with Luer lock
- Close the stopcock on the inflation
 port
- Remove the syringe and purge the air
- Reattach the syringe. Open and again induce negative pressure, pulling the syringe plunger as far back as possible
- Close the stopcock to the inflation lumen and remove the syringe
- <u>Note:</u> To ensure air contained in the balloon and inflation lumen is removed, it is recommended that negative pressure be induced twice or more. Open the stopcock only when the syringe is in place with negative pressure induced
- Fill the Crimp balloon with a 15% max. solution of contrast medium and sterile saline.



15cc Contrast + 85cc Sterile saline solution



Purge the Crimp Balloon





Make sure there are no air bubbles

Insert the Crimp Balloon into the Balloon Gauge





Balloon preparation

- Inflate the Balloon and make sure its diameter fits the Gauge with minimal friction
- While gently pulling and pushing the Balloon, verify that the balloon moves with little resistance to the measuring ring
- If the Balloon does not reach the correct diameter when fully inflated, add or discard of the inflating solution in the syringe
- Make sure there are no air bubbles in the balloon catheter. If a small air bubble is detected, elilinate it while deflecting the balloon
- The syringe must remain connected to the delivery balloon throughout the rest of the procedure

Correct Balloon Sizing is critical to successful valve deployment and Valve function



3 wings fold configuration





Deflate the Balloon, using your fingers to create a 3 wings fold configuration

Remove the Holder from the jar only with a clamp





Single piece Valve Holder





JM

6TH JOINT MEETI WITH MAYO CLIP

Valve Holder

Knot is located on the outside of the valve holder encasement.



Hold encasement with hand and cut the thread located opposite to the knot Opposite site cut KNOT



Once you have cut the thread, take knot and pull thread completely through holder





Once thread has been removed, valve will easily release from holder.





Rinse the Glutaraldehyde sterilant from the Bioprothesis

Rinsing the Bioprosthesis: 2 X 1 minute

The bioprothesis <u>should be kept hydrated</u> throughout the rest of the preparation procedure to prevent the tissue from drying



The saline solution should completely covers the bioprothesis

Place the Bioprothesis gently into the Crimper aperture





JMC

Gradually crimp the Bioprothesis to a diameter of approximately 12mm



JM

Bring gently the Bioprothesis on the balloon

Check the orientation (To be verified by the operator)

Placement of the Bioprothesis

at the mid-point of the balloon shaft. Between its 2 radiopaque markers Green suture at the proximal side

Caution: Special attention should be taken when placing the Bioprothesis on the balloon catheter

Caution: it is recommended that a second operator verify correct mounting / orientation of the Bioprothesis prior to its implantation

Place the Bioprothesis / Balloon assembly back in the Crimper aperture







JM

Gradually, continue to crimp



STH JOINT MEETING

Insert the crimped Bioprothesis / balloon assembly <u>without</u> <u>passing it completely</u> through the gauge



IM

If needed, give an additional pressure to cross the crimp gauge





JMC

Ascendra Delivery System assembly







Advance the Pusher and connect the cap

JMC

The Pusher must be in contact with the crimped valve

Loader insertion







1. Insert gently the Loader

JM

2. Push the Ascendra Delivery System into the Loader

3. Connect the cap to the Loader

Flush again the RetroFlex catheter





Always maintain hydration of the Bioprothesis by flushing

GRAZIE DELL'ATTENZIONE