Words to the young cardiovascular surgeon

Palavras ao jovem cirurgião cardiovascular

How to conduct yourself in the initial procedures of myocardial revascularization

Como se conduzir nos procedimentos iniciais de revascularização do miocárdio

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I see two phases of the young surgeon:

1st - Still in the rearward, receiving direct assistance, or having a teacher available.

The simple fact of knowing that there is someone more experienced that can be consulted, already provides him incredible confidence.

In “solo flight”, for example: starting a Service (and this is not the privilege of someone too young): Surely one chill run down his spine, especially the day before, when speaking to the patient’s family. If there is no certain fear, there is something wrong with this surgeon. Probably, he is very impetuous.

When starting the surgery, I’m sure there will be some degree of hesitation. I make a parallel to a rookie playmaker on a sports team, with great care, expectations and pressure for performance.

Off Pump CABG

Used > 2 Decade

Variation in the world:

5 % USA

75 % INDIA

0-100 % other centers

When surgery is very difficult, I always joke with my staff: “Imagine you, in your first event in the new service, operating the Mayor’s mother, with this coronary pattern.” Or, I say “The eight children are there waiting in the lobby of the operating room, but do not worry, they do not understand much of medicine: One of them is jailer, another is a lawyer - but very annoying, and a professional assassin, but he is on parole! They are waiting for their mummy to be discharged perfectly well! or like in the Northeast, when the Colonel says that the mother will not die alone!”

Even after experienced, we have to take all precautions to avoid trouble:

- perhaps the first orientation, wiser, is not to try early in the career making all revascularization without CPB.

- Use the CPB, except when treating only the arteries of the anterior wall.

- See below a quick overview of current results of surgery with and without cardiopulmonary bypass:
Off pump CABG
Attractive technique
Several initial findings are being refuted

- ↓ surgical trauma (stroke, myocardial injury, infection)
- ↓ systemic inflammatory response?
- ↓ blood transfusion
- ↓ length of stay
- ↓ hospital costs
  - Faster recovery of the patient
  - Maintenance of long-term results?

CABG without CPB

On-Pump versus Off-Pump Coronary-Artery Bypass Surgery
the Veterans Affairs Randomized On-Off Bypass (ROOBY) Study

<table>
<thead>
<tr>
<th>Variable</th>
<th>Off-Pump Group</th>
<th>On-Pump Group</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least one occluded graft - no. of patients</td>
<td>250/685 (36.5)</td>
<td>197/686 (28.7)</td>
<td>0.002</td>
</tr>
<tr>
<td>Graft patency - no. of grafts/total no. (%)</td>
<td></td>
<td></td>
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<tr>
<td>Overall</td>
<td>1659/1998 (82.8)</td>
<td>1839/2095 (87.8)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Saphenous vein</td>
<td>967/1362 (76.6)</td>
<td>1122/1339 (83.8)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Left internal thoracic to left anterior descending artery</td>
<td>589/618 (95.3)</td>
<td>611/635 (96.2)</td>
<td>0.48</td>
</tr>
<tr>
<td>Left internal thoracic to left anterior descending artery, FitchGibbon grade A</td>
<td>550/618 (89.0)</td>
<td>592/635 (93.2)</td>
<td>0.01</td>
</tr>
</tbody>
</table>


Coronary Study
Off-pump or on-pump coronary-artery bypass grafting

79 centers in 19 countries
4752 patients - 30 days and 1 year
No significant difference in the primary outcomes:
death, stroke, MI, renal failure

Incidence every year of isolated coronary operations
(With No CPB vs CPB)
InCor HC FMUSP

2001 - 2005
Isolated CABG = 4521 (n = 924 op/year)
Off Pump CABG = 1791 (38.8%) - No differences were observed between groups

A second orientation is to know indicate the surgery. Find the orientation of the Guidelines and of common sense. For good sense is understood:

- Planning surgery with a HEART TEAM: surgeon, clinical and hemodynamicist. If possible, do not consider the latter as an enemy, but as a possible ally in complex cases, or when something goes wrong in the postoperative period.

- Chatting with family, explaining the risks. Many from University Hospitals are not used to it.

- Trying to integrate the anesthetist in the spirit of each surgery. Currently, I always try to show the catheterization of the patient to the anesthesiologist.

- Also, with the perfusionist. Do not forget that for one or more hours, your patient will be in your hands, and poor perfusion can put everything away.

- Over time, you will learn to master the entire environment during operation. It is very common for the surgeon to do a number of alert during operation, for example, the blood is dark, presence of lung atelectasis, the patient's blood is too hot. I've seen asking to stop the lungs momentarily and forgetting to reconnect it.

- Do not forget that if there is any problem, surely the greater responsible will be the surgeon, even if he does not have anything to do the complication.

- Don't push your luck: For example, foreign body. It is unforgivable to forget gauze, a little compress, even a bulldog inside the patient. I've seen or heard it all and believe me, it is likely to occur. You must be obsessive in such matter!

Also learn to give instructions to the room. The typical example is the shock (I've learned from Dr. Bittencourt). If many ask at the same time to trigger it, it turns into a mess.

A third guideline is that I've learned over time:

- It takes about 10 years to learn to operate. However:
- It takes about 15 years to learn how to indicate surgery.
- It takes about 20 years to learn to contraindicate surgery.

At the beginning, do not feel unable or ashamed to seek advice from those who have been through it all. Often a phone call solves the issue.

Concluding, MRI should be at the discretion of the surgeon. That does not mean that everything has gone well!

I mean that in the immediate postoperative period the surgeon has security to assume an attitude which can also be an addition to surgery in hemodynamics.

The last recommendation is to see the patient in the immediate and late postoperative period. Take this as a routine, which will certainly avoid many problems and improve results.

Be successful!