Report of the Database Committee

Bernard Stockman
Herbert Gutermann

17th annual meeting
November 17, 2012
Ghent
<table>
<thead>
<tr>
<th>OFFICE</th>
<th>NAME</th>
<th>TERM OF OFFICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair</td>
<td>Bernard A. Stockman</td>
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</tr>
<tr>
<td>Member</td>
<td>Liesbeth Bruckers</td>
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<tr>
<td>Member</td>
<td>Laurent De Kerchove</td>
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<tr>
<td>Member</td>
<td>Erik de Worm</td>
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<td>Member</td>
<td>Herbert Gutermann</td>
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<tr>
<td>Member</td>
<td>Marc A. Radermecker</td>
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<td>Member</td>
<td>Paul T. Sergeant</td>
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<tr>
<td>Member</td>
<td>Constantin Stefanidis</td>
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<tr>
<td>Member</td>
<td>Yves Victor Van Belleghem</td>
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<tr>
<td>Member</td>
<td>Carine M. Vandeweyer</td>
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</table>
Database committee 2012

- DBC meetings: 4
- BACTS 2012 registry
- AFIB webregistry
- Report 2009
- Report 2010 draft
- Overview 2011
Data submission

• 2010 error-reports
  – 2 missing

• 2011 data
  – Datafiles received 27/28: 1 missing
  – Error reports will be processed
Please, submit your data earlier
Operations 2001-2011

![Bar chart showing operations data from 2001 to 2011]
Mean Age in Cardiac Operations – Evolution 2001-2011 (adults)
Gender 2001-2011

Cardiac Operations - female

Percentage of cardiac operations performed on females from 2001 to 2011.


Procedure subgroups
Evolution 2003-2011

BACTS
Isolated CABG 2001-2011
Isolated CABG 2001-2011

Graph showing the number of isolated CABG procedures from 2001 to 2011, with bars indicating off-pump and on-pump procedures for each year. The graph includes a note stating "Opcab 19.99%".
Congenital Cardiac Surgery

National Report - Baby Heart - Belgium - 2010

Number of CPB and non-CPB procedures for patients aged 0 to 18 years

<table>
<thead>
<tr>
<th>hospital</th>
<th>CPB procedures</th>
<th>non-CPB procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>other hospitals</td>
<td>369</td>
<td>88</td>
</tr>
</tbody>
</table>

Number of CPB and non-CPB procedures for patients below 1 year of age

<table>
<thead>
<tr>
<th>hospital</th>
<th>CPB procedures</th>
<th>non-CPB procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>other hospitals</td>
<td>182</td>
<td>66</td>
</tr>
</tbody>
</table>

Mean Aristotle Basic Score and STS-EACTS Mortality Score

<table>
<thead>
<tr>
<th>hospital</th>
<th>mean BS</th>
<th>std. dev. BS</th>
<th>mean MS</th>
<th>std. dev. MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>other hospitals</td>
<td>6.734</td>
<td>2.542</td>
<td>0.698</td>
<td>0.699</td>
</tr>
</tbody>
</table>
BACTS 2012 Registry concept
proces of data merging and analysing

BACTS-file (file-maker)
Access
Excel
Dendrite (PATS)
other
Web based

BACTS 2012 Registry

Excel
Excel
Excel
Excel
Excel

BACTS Cardiac Surgical Database Report

The European Association for Cardio-Thoracic Surgery

Fourth BACTS Adult Cardiac Surgical Database Report 2016
Towards global benchmarking
• MOU: confidentiality principle unchanged
• AFIB: legal requirement to provide data
Cardiac History

- Angina Status
- Dyspnoea
- Most recent myocardial infarction
- Number of previous myocardial infarctions
- Congestive heart failure
  
  (A low EF alone, without clinical evidence of heart failure does not qualify as heart failure)

Myocardial infarction
- Two of the following four criteria are necessary:
  1. Prolonged (>20min) typical chest pain not relieved by rest and/or nitrates
  2. Enzyme level elevation: either - CK-MB > 5% of total CPK
     - CK greater than twice normal
  3. Any wall motion abnormalities as documented by LV Gram, Echo and/or EF < 45%
  4. Serial ECG (at least 2) showing changes from baseline or serially in ST-T and/or Q waves that are 0.03 s. in width and/or ≥ 1/3 of the total QRS complex in 2 or more contiguous leads.
FileMaker Application

- **6 users:** CHU Jolimont, ASZ Aalst, UZ Brussel, Imelda Bonheiden, SJ Brussel, CHU Brugmann

- **FMP 11**
  - upgrade to FMP 12

- **Credits**
  - Initial set-up of center specific file
  - Multi-users, network
  - Center specific modifications
Symposium

- Improvement of quality of care through better data registration
  - Tuesday February 19 at 20:00
  - Users meeting
  - Accreditation
BACTS atrial fibrillation management database

Reimbursement criteria

- **Inclusion criteria**
  - Concomitant surgical treatment of documented atrial fibrillation in combination with one of the following
    - 229014-229025,229515-229526,229574-229585,229596-229600,229611-229622,229633-229644

- **Exclusion criteria**
  - Permanent atrial fibrillation > 5 years
  - Left atrial diameter > 65 mm (parasternal long axis view)
  - Percutaneous ablation for atrial fibrillation during same admission
  - Linear ablation pen only

- **703496-703500 U 1876** (only once)
BACTS atrial fibrillation management database

AFIB registry: disposable probes

• Web-based
  – Protected server
  – Centre login/password
  – Only access to centre specific data

• BACTS 2012 registry filemaker pro application
  – Synchronisation with server
Starting from 1st of November there is a regulation for the reimbursement of the disposable probes for concomitant atrial fibrillation ablation. The number of devices used during the current year is 10.

The registry for the reimbursement of the disposable probes consist of three parts:

Pre-operative form: to be filled in before discharge of the patient
Procedural form: to be completed within one month after the procedure
Follow-up form: 3 follow-ups during two years (one echocardiography and one Holter)

The first two parts have to be completed for reimbursement. As proof of completion two receipt numbers will be given.


Inclusion criteria
- Concomitant surgical treatment of documented atrial fibrillation in combination with one of the following: 229014-229025,229515-229526,229574-229585,229595-229600,229611-229622,229633-229644

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<thead>
<tr>
<th>Clinical</th>
<th>Pre OP AF Therap</th>
<th>Pre OP EG Eval</th>
<th>Card Surg</th>
<th>Abl Proc</th>
<th>Left Side</th>
<th>Right Side</th>
<th>In Hosp post Res</th>
<th>Med Treat Discharge</th>
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<tbody>
<tr>
<td>* Last pre OP ECG:</td>
<td>Atrial Fibrillation</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>* AF Type:</td>
<td>Persistent</td>
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<td></td>
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<td></td>
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</tbody>
</table>
| * First AF Episode: | | | | | | | | dd/mm/yyyy
| * Aetiology: | | | | | | | | |
| * Main Complaint or Symptom: | | | | | | | | |
| Symptomatic: | | | | | | | | ☐
| Previous Thromboembolic Event: | | | | | | | | ☐
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<th>In Hos post Res</th>
<th>Med Treat Discharge</th>
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<tbody>
<tr>
<td>Beta Blockers:</td>
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<td>Anti-Aggregants:</td>
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<td>Catheter His Bundle Ablation:</td>
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<td>Closed Chest Surgical Ablation:</td>
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BACTS atrial fibrillation management database
AFIB registry: disposable probes

- Pre-operative form
  - To complete before discharge
  - Receipt number

- Procedural form
  - To complete within one month
  - Receipt number and notification form

- Follow-up form
  - 3 follow-up / 2 years
  - 1 ECHO / 1 Holter
Follow-up

- Mandatory 2 years
  - 3 FU
  - 1 Echocardio and 1 holter
- Controlled by “Dienst geneeskunde verzorging / service des soins de santé”
  - Modality unclear
- >20% missing FU
  - Reimbursement suspended by RIZIV/INAMI
ATRIAL FIBRILLATION MANAGEMENT DATABASE

Since the 1st of November there is a regulation for the reimbursement of the disposable probes for concomitant atrial fibrillation ablation. The registry for the reimbursement of the disposable probes consist of three parts:

- **Pre-operative form**: to be filled in before discharge of the patient
- **Procedural form**: to be completed within one month after the procedure
- **Follow-up from**: 3 follow-ups during two years (one Echocardiography and one Holter)

The first two parts have to be completed for reimbursement. As proof of completion two receipt numbers will be given.

Once the two parts of the registration, namely the pre-operative part and the procedural part, are completed, a notification form is produced. The latter must be produced within 30 days following the intervention. The notification form must be signed by the electrophysiologist and the cardiac surgeon. The cardiac surgeon is responsible for the transmission of the notification form to the hospital pharmacist who will transmit it to the insurance company together with the invoice.

Follow-up: In the "akkoordverklaring/déclarion d'accord" the follow-up is unclear. Three follow-up visits and one echo and one holter are mandatory during two years.

**We propose to have three follow-up visits during two years.**

- first follow up at 6 months (+/- 2 months), with echo and holter
- second follow up at 12 months (+/- 2 months)
- third follow up at 24 months (+/- 3 months)

Please note that follow-up is mandatory (as stated in the agreement) for the future
From nov. 2011 until nov. 2012: 254 Ablations for concomitant AF

In 2009: 211 registered AF-procedures
- From nov. 2011 until nov. 2012: 254 Ablations for concomitant AF

☞ in 2009: 211 registered AF-procedures
Type of AF:
- Paroxysmal (self terminating <7d): 29%
- Persistent (7d-1y, or cardioversion): 13%
- Long Standing Persistent (>1y): 10%
- Permanent (only rate control): 47%
Demographics: 60% male, mean age 68 ± 11 years

Type of Surgery:

- Mitral Valve Surgery: 63%
- Non-mitral Surgery: 37%
Type of device:

- 2/3 PV isolation
- 1/3 CM-IV (n=36)
LAA closure:

62% Port-Access

29% External

21% Internal

17%

33%
- Ablation-lines used in paroxismal AF
- Ablation lines used in chronic AF

BACTS Atrial Fibrillation Management Database

CM-IV: 57%
- Complications

- Rythm at Discharge

BACTS Atrial Fibrillation Management Database

43% on Amiodarone/Dronedarone

Paroxismal: 60%
Persistent: 78%
Long-standing Persistent: 58%
Permanent: 0%
Follow-up

Three follow-up visits during two years

- first FU at 6 months (± 2 months), with echo and holter
- second FU at 12 months (± 2 months)
- third FU at 24 months (± 2 months)

6 months FU = 28% complete (37/132pt) !!