# Quality indicators for the surgeons : the best choices

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“The surgeons have the sad privilege of being unaccountable and uncontrollable”

Richard von Volkmann

# History :

- 1854:Nicolay Pirogov “On luck in Surgery”
- 1881 : Richard von Volkmann : the farmer (traditional) and the manufacturer (from whom the public expects high quality products)
- 1891 :Johan von Mickulicz : surgery, a modern technology with a risk potential demanding risk management strategy similar to those used in the industry and railway transports
- 1907 : Theodor Kocher (Nobel price) : use of statistical calculations to prove safety and usefulness of his surgery
- 1990 : Lucian Leape: proposes the “aviation model” to evaluate medical activities

# How to define high quality care

- "To receive the most appropriate treatment at the most appropriate time by the most appropriate person"
- This includes avoidance of errors and mistakes but also the entire experience of receiving care including respect for treatment using the best available evidence by medical professionals and clear answer to questions
- The triple aim : care, health and cost

# How to measure QoC : the indicators

- A considerable debate about which measures should be used to reflect surgical quality
- Indicators should be related to
  - Structure (material resources, human resources, organizational structure)
  - Process (diagnosis, treatment)
  - Outcome

# The challenge of developing quality measures for breast surgery *

- Surgical QoC measures on cancer surgery have focused on 30 day morbidity and mortality for high risk procedures (pancreatectomy, esophagectomy)
- Breast cancer surgery has an extremely low risk of major complications
- BC surgery is part of multidisciplinary treatment : many measures are difficult to link to health (survival) benefits : re excision for surgical margins, omitting ALND for positive SLND…
- The uncertainty about the link between the process and health outcome also underscores “which rate is right”
- The variability of surgeons’ opinions and practice and behaviours

- M.Morrow JAMA 2012

# Structure related indicators for BCS

| | EUSOMA | BREAST CENTERS NETWORK | SIS | GERMANY | FRANCE |
|---|---|---|---|---|---|
| N° of new BC /centre/ year | 150 | 150 | 150 | 150 | 30 |
| N° of Breast surgery per surgeon / year | 50 | 50<br>Spends 50%of his time caring Breast disease | 50 | 50 | ------------- |
| | | | | | |
| Multidisclinary meetings | 1 weekly meeting, 90% BCP to be discussed | 1 per week | Surgeon trained in breast surgery and communication | 4 per year | 2 per patient ( 1 pre and 1 post-operative) |
| Surgeon's training | | | Surgeons trained in breast surgery and communication | 1 day per year | --------------------- |
| Use of updated evidence based guidelines | | | | | yes |

# Process related indicators for BCS

| | EUSOMA | BREAT CENTERS NETWORK | SIS | GERMANY | FRANCE |
|---|---|---|---|---|---|
| Pre operative histological Dg | 80% | | 90% | | ------------- |
| Pre or per,operative location for non palpable lesions | | | | 95% | |
| BCS | 83% for invasive T< 3cm (incl.DCIS comp) | | Treatment of choice for small lesions | 70-90% | |
| Mastectomy | | | Recommended if woman's choice or bad candidate for BCS | | |
| ALND | At least 10 lymph nodes : 95% | | At least 10 nodes in 90% of pts | | |
| SLND | 90% in pN0 | Method of choice for staging the axilla | Detection rate : 95 % | 75% for invasive BC (pT1 cN0) | |
| Immediate and delayed reconstruction | | 1 reconstructive surgeon available<br>In each unit | Patients should be informed of possibilities or reconstruction | Techniques needed for certified breast surgeons | |

# Other indicators….

- Waiting time for surgery : less than 2 weeks (SIS)
- Follow up :
  - for cosmetic results (Germany)
  - by the surgeon : at least one year (SIS)

# Few breast cancer surgeons follow quality of care standards !!!

- Press January 2010
- Katz et al Coordinating cancer care patients and practice management processes among surgeons who treat breast cancer  Medical care 2010
- Survey on 318 surgeons
- 25 to 33% of surgeons reported they had routinely discuss patients treatment plans in multidisciplinary meetings
- Surgeons with high volume activity are more likely to discuss their patients

# What about individual surgical practices?

- "Size does not matter : high volume breast surgeons accept smaller excision margins for wide local excisions : a national survey of surgical management of wide local excisions in UK cancer patients"
- Hassani et al the Breast 01/2013
- Survey among surgeons members of the Association of Breast Surgeons (UK)
- 281 answers
- Surgeons operating more than 50 cancers per year accepted smaller margins than those operating less than 50 ($p < 0.2$)

# How to improve?

- Breast units certainly are the best structures to improve QoC in breast surgery :
  - Reduced teams making possible consensual attitudes
  - Elaboration of guidelines approved by the community
  - Permanent informal meetings

- Certification procedures and surveys provide to the actors objective data on their activities

# Conclusions

- Surgeons are nor any more uncontrollable and unaccountable
- But they will always have to deal with technical difficulties , per operative immediate decision making, subjectivity
- The aviation model is certainly a factor of progress for quality of care, but patients will nether be aircrafts