Training and practice of breast surgery: international variation

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Training in the UK

Surgical training:
- National matching process
- Requirement to pass written and viva examinations (Membership of the Royal College of Surgeons of Edinburgh or England or Ireland or Glasgow); ATLS; other basic courses (eg endoscopy, laparoscopy)
- Six monthly assessments of competency (clinical/surgical skills, teaching, administration, academic)
- Intercollegiate “Board” exams in general surgery (with specialist interest possible)

Breast surgery:
- Three levels of training
- Wide variations in oncoplastic/reconstructive training (including Fellowships)
- Breast screening, family history services, all breast conditions, benign and malignant.
- FNA, core biopsy, breast ultrasound, IORT, trials methodology, translational research
- [historically breast/endocrine; breast/melanoma; breast/general/emergency]
Australia and New Zealand*

- Postgraduate surgical training is organized by the surgical societies – Breast Surgery ANZ
- Fellowship positions are centrally administered, though some remain under the control of institutions and individuals
- Willingness to accept international applicants who are well trained – different approach to high quality care
- Some Australasian surgeons chose to do their Fellowship abroad

*Prof Bruce Mann, Director of Breast Service, Royal Melbourne and Royal Women’s Hospital

Who does what elsewhere?

Similar training across Europe
- Threat of the European working time directive
- In Germany, the gynaecologists are the breast surgeons
Specialist breast surgery accreditation available in Europe (but not recognised in the UK)
Globally:
- UK aligned models in the British Commonwealth
- In South Korea some breast surgeons give chemotherapy

Who does what elsewhere?

Training and certification of Surgical Oncologists
Globally: there is global variation*
- 6 WHO regions: Africa, Americas, Eastern Med, Europe, SE Asia, Western Pacific
- Life expectancy, education, income: to create high, medium or low Human Development Index (HDI) countries

Who does what elsewhere*?

<table>
<thead>
<tr>
<th>Country</th>
<th>US</th>
<th>S Africa</th>
<th>Pakistan</th>
<th>China</th>
<th>Australia</th>
<th>Norway</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDI</td>
<td>0.937</td>
<td>0.629</td>
<td>0.515</td>
<td>0.699</td>
<td>0.938</td>
<td>0.95</td>
</tr>
<tr>
<td>Population</td>
<td>319 M</td>
<td>53 M</td>
<td>188 M</td>
<td>1,365 M</td>
<td>24 M</td>
<td>5 M</td>
</tr>
<tr>
<td>Inhabitants/physician</td>
<td>400</td>
<td>1,000</td>
<td>1,250</td>
<td>526</td>
<td>303</td>
<td>230</td>
</tr>
<tr>
<td>Fellowship requirement</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Total years training</td>
<td>15-17</td>
<td>17-18</td>
<td>15</td>
<td>17</td>
<td>14-17</td>
<td>16</td>
</tr>
</tbody>
</table>

• Remarkable similarities


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TARGIT Trial of intrabeam intraoperative radiotherapy

*Vaidya J et al Lancet Oncology 2013*
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Preoperative window trials

• In vivo tumor drug/biomarker target testing
• Pre-operative setting: “window of opportunity” before surgery... duration?
• Evidence for biological effects of metformin in operable breast cancer: a pre-operative, window-of-opportunity, randomized trial* **

**Hadad et al. Breast Cancer Res Treat 2015; online 15th February

Preoperative window trials

• Pictilisib (GDC0491)***
• 42....70.....140 patients

***Schmid et al. SABCS 2014, oral presentation
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Some philosophy

• Multidisciplinary elements to training in breast surgery*
• Proud tradition of international surgical leadership in prevention, screening, neoadjuvant and adjuvant trials
• Surgical training never stops – Travelling Clubs, visiting Professorships (King James IVth Society)
• Surgeons educating others (never stops!)

*Thompson AM What is the future for surgical oncology? Brit J Cancer 2011; 105: 1627
Conclusions

• There appears to be “consistency” in training internationally despite differences in requirements for service provision

• Breast surgical training is still evolving, as breast services develop and evolve

• Enormous opportunities.............and variations around the world