

Coronary artery bypass surgery in Ireland—gender differences

Ms Eilis McGovern

Cardiovascular disease is the biggest killer in Ireland, but is still regarded as a man's disease. There is evidence that females with heart disease are treated differently—they tend to present later in the course of the disease and are less likely to have an angiogram.

Are there any differences between male and female patients undergoing coronary artery bypass surgery in Ireland? In order to answer this question we analysed data from the Irish Cardiac Surgery Register. The register was set up in 1983 and is funded by the Department of Health. It now collects information on approximately 80% of all adult cardiac surgical procedures carried out in Ireland.

Between 1993 and 1999 there were 5494 primary coronary artery bypass operations performed (i.e. first-time procedures, no re-do operations and no associated procedures), of which 1101 were on female patients (20%). This is an increase on the 1983 to 1992 time period when 16% were female. The trend is steadily upward, with the highest figure in 1999 (22%).

The female patients are on average five years older than the males—65 vs. 60 (overall average 61 years), and the average age in both groups is increasing with time.

As has been described in other countries, female patients tend to be more symptomatic at the time of surgery—77% have CCS 3 or 4 angina versus 64% of males. They are

more likely to have rest pain—44% vs 34%. This is reflected in a higher need for urgent surgery—51% of females have urgent operations, the proportion in males is 42%.

Slightly more women have associated co-morbidity, for example diabetes mellitus, peripheral vascular disease, carotid disease (34% vs. 29%), and women are more likely to have poor-quality distal coronary arteries.

All of the factors discussed above are known to be associated with a less favourable outcome following bypass surgery and this is the case with our results also. While the overall operative mortality was 2%, which is excellent by international standards, the mortality for females was 3.0% and that for males was 1.7%. All major studies have shown this trend. Women also have a significantly longer hospital stay than men.

It is clear from these figures that the increasing numbers of female patients requiring coronary artery bypass surgery, coupled with a higher risk profile, is going to result in a greater burden on both hospital and community services. Consideration of these needs must be taken into account in future health planning.

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