Abstract: Female sterilisation is an extensively used method of contraception all over the world but there appears to be a decline in the performance of this procedure in Ireland. This paper attempts to establish the extent of the decline of laparoscopic sterilisation and to explore possible explanations. Data for female sterilisation from Ireland were obtained from the Hospital In-Patient Enquiry Scheme (HIPE) section of the Economic and Social Research Institute for the years 1999 to 2004. The first year for which returns of this data was obligatory was 1999 and from 2005 the coding scheme was modified and now uses the ICD10. The coding scheme has the facility to include figures for long acting reversible contraceptives. The etonogestrel implant, Implanon, was introduced in 2001 and from 2002 to the end of 2005 over 30,000 units were distributed in Ireland (Table 1).

Methods

Data for female sterilisation from Ireland was obtained from the Hospital In-Patient Enquiry Scheme (HIPE) section of the Economic and Social Research Institute for the years 1999 to 2004. The first year for which returns of this data was obligatory was 1999 and from 2005 the coding scheme was modified and now uses the ICD10. The coding scheme has the facility to include figures for long acting reversible contraceptives. The etonogestrel implant, Implanon, was introduced in 2001 and from 2002 to the end of 2005 over 30,000 units were distributed in Ireland (Table 1).

Discussion

We are satisfied that the HIPE data provide a reasonable estimate of female sterilisation activity since the results are very similar and the totals are thought to represent 95% of national coverage by the Department of Health and Children. We have shown a dramatic decline in laparoscopic sterilisation in Ireland in recent years. This decline has coincided with the introduction of progestagen-loaded reversible contraceptives, particularly the LNG-IUS, which has seen a huge increase in sales over the same period.

The swiftness of the change in medical practice probably suggests that this has been physician led, rather than patient demand led, from the outset. It may reflect that doctors, particularly gynaecologists, were not very enthusiastic about laparoscopic sterilisation and were eager to adopt potentially safer and reversible alternatives. Recent sales figures for long acting reversible contraceptives, specifically the etonogestrel-loaded contraceptive system (LNG-IUS) (Mirena) and the etonogestrel implant (Implanon) were obtained from their suppliers, Schering (Ireland) and Organon (Ireland) respectively.

Results

The HIPE Scheme is a computer based health information system designed to collect medical and administrative data regarding discharges and deaths from acute hospitals. Each HIPE discharge record represents one episode of care and every care event other than one hospital episode with the same or different diagnoses. The records therefore facilitate analyses of hospital activity rather than incidence of disease. In the current study, all laparoscopic and open sterilisation procedures, which have individual codes depending on the method of tubal occlusion or destruction, were divided into two simple groups, laparoscopic or open (which include procedures carried out at time of Caesarean section).

Female sterilisation is a surgical procedure and is therefore unusual in that the indication for surgery is generally patient request for social reasons and not a treatment prescribed by a doctor for medical reasons. Also it is the responsibility of the doctor to ensure that the patient has all the information required to make an informed decision. This is important, as female sterilisation is a frequent cause of medical litigation. Major morbidity caused by laparoscopic sterilisation is a rare event but serious complications such as bowel obstruction, maternal death and the risk of blood vessels that require laparotomy to lead to death. The risk of laparotomy as a result of a severe, complications, is 1.9/1,000 procedures (Horgan and Practice Surveys’ recording laparotomy rates of 1.43/1,000 cases. The risk of death with a laparoscopy is one in 12,000. Some women are at increased risk from conditions such as previous abdominal surgery or obesity. Previous abdominal surgery, most commonly laparotomy, is a significant risk factor for laparotomy, pelvic inflammatory disease and the relative risk of complications and need for laparotomy. Many women in Ireland now have had at least one Caesarean section. Up to 10% of Irish women are either overweight (BMI = 25.0–29.9) or obese (BMI 30) and the prevalence of pelvic inflammatory disease is also increasing. Some of the newer long-acting contraceptive methods are as effective as tubal occlusion and yet preserve reversibility and have the huge advantage of being office procedures, requiring relatively little training, and with a small risk of procedure related injury. The cumulative pregnancy rate for the LNG-IUS is 1.1/100 after five years of typical use.
In our own units, laparoscopic sterilisation has almost disappeared completely. Some consultants stopped offering the procedure once the LNG-IUS became available as an alternative. There was little resistance from patients or from referring physicians and it is apparent that the change in policy has been broadly accepted. Thus, it would seem that a procedure that was introduced in Ireland to considerable furore is becoming rapidly obsolete. Many will have no regrets about its passing.

References

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