

Preventing Infection in Abortion Care

FIAPAC

Rome

13th October 2006

Janesh Gupta

Professor of Obstetrics and Gynaecology

University of Birmingham

Birmingham Women's Hospital



Induced Abortion

- Most commonly performed gynaecological operations
 - 175,500 terminations in E&W annually
 - 11,000 terminations in Scotland annually
 - 1,500 from Northern Ireland → England
- In Scotland 99.8% are done by NHS staff
- In E&W 78% by NHS funded and 22% through contracts with non-NHS providers

National UK Guidelines

The Care of Women Requesting Induced Abortion

**Evidence-based Clinical Guideline
Number 7**

September 2004



Royal College of Obstetricians and Gynaecologists
Setting standards to improve women's health

Levels of Evidence

Level	Evidence
Ia	Evidence obtained from meta-analysis of randomised trials
Ib	Evidence obtained from at least one randomised controlled trial
IIa	Evidence obtained from at least one well-designed controlled study, without randomisation
IIb	Evidence obtained from at least one other type of well-designed quasi-experimental study
III	Evidence obtained from well designed non-experimental descriptive studies, correlation studies and case studies
IV	Evidence obtained from expert committee reports or opinions and/or clinical experience of respected authorities

Recommendations

Grade of recommendation	Evidence level
A	Requires at least one randomised controlled trial as part of a body of literature of overall good quality and consistency addressing the specific recommendation (<i>evidence levels Ia, Ib</i>)
B	Requires the availability of well-conducted clinical studies, but no randomised clinical trials on the topic of the recommendation (<i>evidence levels IIa, IIb, III</i>)
C	Requires evidence obtained from expert committee reports or opinions and/or clinical experience of respected authorities. Indicates an absence of directly applicable clinical studies of good quality (<i>evidence level IV</i>)
Good practice points ✓	Recommended best practice based on the clinical experience of the Guideline Development Groups

Information for Women

B Post-abortion infection: genital tract infection, including pelvic inflammatory disease of varying degrees of severity, occurs in up to 10% of cases. The risk is reduced when prophylactic antibiotics are given or when lower genital tract infection has been excluded by bacteriological screening.

Presence of chlamydia, gonorrhoea and bacterial vaginosis at time of abortion is associated with increased risk

Long-term sequelae – tubal infertility and ectopic pregnancy

Prevention of infective complications

A Abortion care should encompass a strategy for minimising the risk of post-abortion infective morbidity. As a minimum, services should offer antibiotic prophylaxis.

- **Level Ia evidence from a meta-analysis of RCTs**
- **Use of antibiotic prophylaxis at the time of abortion is associated with a reduction in the risk of subsequent infective morbidity by around 50% (Sawaya et al Obstet Gynecol 1996)**

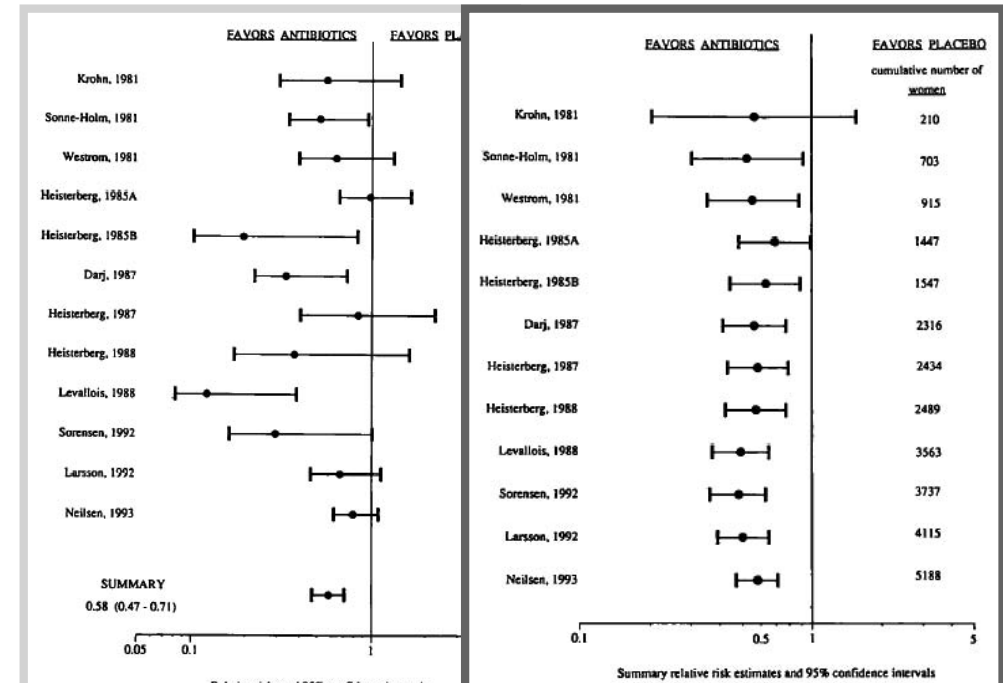


Figure 1. Relative risks and 95% confidence intervals for post-abortion infection in antibiotic-treated versus placebo-treated women.

Figure 2. Cumulative summary relative risk estimates and 95% confidence intervals for all studies.

Compelling Evidence

Substantial protective effect of antibiotics in ALL subgroups of women undergoing therapeutic abortion, even women in low-risk groups

No more placebo-controlled trials should be performed, because women assigned to placebo are exposed to preventable risk

Routine use of periabortal antibiotics in the United States may prevent up to half of all cases of postabortal infections

Compelling Evidence

Assuming a very low incidence of postabortal infection of 1% in the 1.4 million average-risk women undergoing abortion each year in the United States, routine use of periabortal antibiotics would prevent more than 6500 cases of infection annually

Treating all average-risk women would cost \$336,000, but would save more than \$965,000 annually in direct costs alone

Controversies

■ Prophylaxis treatment to all – is it cost effective?

■ Screen and treat

■ Penney *et al* 1998 compared prophylaxis and a 'screen and treat' strategy in terms of both clinical and cost-effectiveness in a randomised trial

RCT data (Penney *et al* 1998)

■ Primary outcomes measured:

■ Prevalence of post-abortion infective morbidity as assessed by:

- | general practitioner
- | prescription rates
- | hospital re-attendances

RCT data (Penney *et al* 1998)

- 1672 women recruited
- Prevalence rates of:
 - ▮ C. trachomatis 5.6%
 - ▮ N. Gonorrhoea 0.19%
 - ▮ Bacterial vaginosis, 17.5%

RCT data (Penney *et al* 1998)

Universal prophylaxis cost was less than 50% that of screening with treatment and follow-up of positive cases

i.e. universal prophylaxis was at least as effective as a policy of 'screen and treat' in minimising short-term infective sequelae of abortion and could be provided at less cost

Other data

Scandinavian RCT of 1655 women indicated that pre-operative treatment with clindamycin cream reduced the incidence of post-abortion infective morbidity by a factor of four (Larsson PG *et al* 2000)

UK RCT indicated that peri-operative metronidazole might reduce the risk of infective morbidity by a factor of two (Crowley T *et al* 2001)

Periabortion Prophylaxis

C The following regimens are suitable for periabortion prophylaxis:

- metronidazole 1 g rectally at the time of abortion plus
- doxycycline 100mg orally twice daily for 7 days, commencing on the day of abortion OR
- metronidazole 1 g rectally at the time of abortion plus
- azithromycin 1 g orally on the day of abortion.

■ **Evidence to support specific antibiotic regimens for periabortion prophylaxis remains scant**

■ **Chosen regimen should cover both anaerobic vaginosis and C. trachomatis**

Periabortion Prophylaxis

An updated guideline from the US National Abortion Federation recommends antibiotics at the time of surgical abortion but does not suggest a specific regimen (2003)

Recent UK and US guidelines on the management of victims of sexual assault recommend either the 7-day doxycycline regimen or the immediate-dose azithromycin regimen for prophylaxis in that context (2002)