## Chapter 9 Summary: Physical complications: infection and infertility

Pelvic Inflammatory Disease (PID) is an infection that occurs when bacteria from the vagina or cervix move up into the uterus, uterine tubes, or ovaries. Women who undergo an induced abortion later suffer an up to ten per cent higher rate of Pelvic Inflammatory Disease (PID) than the general population.<sup>1</sup> PID following a pregnancy termination can be caused by operative injury, retained products of conception, or pre-existing infection.<sup>2</sup>

Risk factors for PID include previous PID, no previously borne children, previous induced abortion, multiple sex partners, and pre-existing infection.<sup>3</sup> Antibiotics are often distributed to women presenting for abortion with pre-existing Chlamydia; however, the effectiveness of this approach is highly debated.<sup>4</sup>

Adverse effects of PID include chronic pelvic pain, subfertility, infertility, and ectopic pregnancy.<sup>5</sup> Infertility is particularly difficult to study, for reasons such as its varying diagnostic criteria and the inability to find appropriate control groups. However, it is generally agreed that women with a history of PID are at significantly increased risk of infertility.<sup>6</sup> One study found that subfecundity increased by no less than 620 per cent among women who terminated a pregnancy.<sup>7</sup>

Finally, PID is the most common cause of ectopic pregnancy.<sup>8</sup> Induced abortion can cause ectopic pregnancy through retained products of conception and PID.<sup>9</sup>

<sup>&</sup>lt;sup>1</sup> Penney GC, Thomson M, Norman J, et al. A randomised comparison of strategies for reducing infective complications of induced abortion. BJOG 1998; 105(6): pp. 599-604.

<sup>&</sup>lt;sup>2</sup> Rahangdale L. Infectious complications of pregnancy termination. Clinical Obstetrics and Gynecology 2009; 52(2): 198-204, p. 198.

<sup>&</sup>lt;sup>3</sup> Nielsen IK, Engdahl E, Larsen T. [Pelvic inflammation after induced abortion] Danish. *Ugeskr Laeger* 1992 September 28; 154(40): pp. 2743-6; Levallois P, Rioux JE. Prophylactic antibiotics for suction curettage abortion: results of a clinical controlled trial. AJOG 1988; 158(1): pp. 100-5; Lawton BA, Rose SB, Bromhead C, Gaitanos LA, MacDonald EJ, Lund KA. High prevalence of *mycoplasma genitalium* in women presenting for termination of pregnancy. Conception 2008; 77(4): pp. 294-8.

<sup>&</sup>lt;sup>4</sup> Achilles SL, Reeves MF. Prevention of infection after induced abortion: release date October 2010 SFP Guideline 2012. Contraception 2012; 83(4): pp. 295-309.

<sup>&</sup>lt;sup>5</sup> Sorensen JL, Thranov I, Hoff G, Dirach J, Damsgaard MT. A doubleblind randomized study of the effect of erythromycin in preventing pelvic inflammatory disease after first-trimester abortion. BJOG 1992; 99(5): p. 436.

<sup>&</sup>lt;sup>6</sup> Torres-Sanchez L, Lopez-Carrillo L, Espinoza H, Langer A. Is induced abortion a contributing factor to tubal infertility in Mexico? Evidence from a case-control study. International Journal of Obstetrics and Gynaecology 2004; 111(11): pp. 1254-60.

<sup>&</sup>lt;sup>7</sup> Hassan MAM, Killick SR. Is previous aberrant reproductive outcome predictive of subsequently reduced fecundity? Human Reproduction 2005; 20(3): pp. 657-64.

<sup>&</sup>lt;sup>8</sup> Tenore J. Ectopic pregnancy. American Family Physician 2000; 61(4): pp. 1080-8.

<sup>&</sup>lt;sup>9</sup> Chung CS, Smith RG, Steinhoff PG and Mi MP. Induced abortion and ectopic pregnancy in subsequent pregnancies. American Journal of Epidemiology 1982; 115(6): pp. 879-87.