ADHESIONS FACT SHEET

The Facts about Adhesions

Pelvic adhesions are abnormal bands of scar tissue that form in the pelvis and cause organs to stick or bind to one another. Adhesions occur in the majority of women who have pelvic surgery.

Most types of pelvic or abdominal surgeries can lead to the formation of adhesions. Adhesions are also common in women who suffer from pelvic inflammatory disease (PID), endometriosis (en-do-me-tree-o-sis – a condition where patches of endometrial-like tissue attach to the surfaces of other organs in the pelvis (such as the ovaries and fallopian tubes) and in the abdominal cavity), or sexually transmitted diseases.

Not all adhesions cause pain, and not all pain is caused by adhesions.

How prevalent are adhesions?

- Adhesions develop in 93% of patients following abdominal and pelvic surgery (Fox Ray, et. al, 1993).
- Between 55 and 100% of patients undergoing pelvic reconstructive surgery will form adhesions.
- Post-surgical adhesions cause up to 74% of bowel obstructions. Post-surgical adhesions are responsible for 20-50% of chronic pelvic pain cases. Adhesions also are a leading cause for female infertility, causing 15-20% of cases (Ray, et. al, 1998).
- Following surgical treatment of adhesions causing intestinal obstruction, obstruction due to adhesion reformation occurred in 11 to 21% of cases (Menzies, 1993).
- Chronic pelvic pain is estimated to affect nearly 15% of women between 18 and 50 (Mathias et. al, 1996). Other estimates arrive at between 200,000 and 2 million women in the United States (Paul, 1998).
- Kresch et. al, (1984) studied 100 women and found adhesions in 38% of the cases and endometriosis in another 32%.
- Overall estimates of the percentage of patients with chronic pelvic pain and adhesions are about 25%, with endometriosis accounting for another 28% (Howard, 1993).

What problems can adhesions cause?

While most adhesions do not cause trouble, adhesions can lead to a variety of potentially serious complications including:

- **Pelvic pain:** Adhesions are a common cause of pelvic pain – an estimated 38 percent of women suffering from pelvic pain have adhesions. Adhesions cause pelvic pain because they bind normally separate organs and tissues together, essentially "tying them down" so that the stretching and pulling of everyday movements can irritate nearby nerves.

- **Pain during intercourse:** Adhesions can also cause pain during intercourse (a condition called dyspareunia/dis-pah-roo-ne-ah).

- **Infertility:** Adhesions that form as a result of certain types of gynecologic surgery, especially tubal surgeries and surgeries to remove fibroids (myomectomies), are a common cause of infertility. Adhesions between the ovaries, fallopian tubes or pelvic walls can block the passage of the ovum (egg) from the ovaries into and through the fallopian tubes. Adhesions around the fallopian tubes can also make it difficult or impossible for sperm to reach the ovum.

- **Bowel obstruction:** Adhesion formation involving the bowel is particularly common following a hysterectomy. While these adhesions don't normally result in any problems, there is one serious problem that can develop. This problem is called intestinal or bowel obstruction (blockage of the intestine that limits or stops passage of its contents) and it can occur a few days or many years after surgery. Symptoms of bowel obstruction may include pain, nausea, and vomiting.

What are the economic costs of adhesions?

The economic effects are quite staggering. In a survey of households, Mathias et. al (1996) estimated that direct medical costs for outpatient visits for chronic pelvic pain for the U.S. population of women aged 18-50 years are $881.5 million per year. Among 548 employed respondents, 15% reported time lost from paid work and 45% reported reduced work productivity.

Adhesions are also a costly medical problem. A recent study found that surgery to remove adhesions (a procedure called adhesiolysis/ad-he-ze-o-li-sis) was responsible for more that 300,000 hospitalisations during one year, primarily for procedures involving the female reproductive system and digestive tract, and accounted for $1.3 billion in hospitalisation and surgeon expenditures (Ray et. al, 1998).

In 1988, there were about 280,000 hospitalizations for adhesions, the economic cost of which was estimated conservatively as $1.2 billion per year (Fox Ray et. al, 1993).

Because adhesions are common and a potentially serious complication, it is very important to discuss adhesions with your physician and to learn all you can about what he or she plans to do to help prevent them. It may be helpful to be prepared with the following questions:

- ✓ How likely is it that adhesions will form as a result of this procedure?
- ✓ What will be done during the procedure to help prevent adhesions from forming?
- ✓ Is the use of a barrier method of adhesion prevention right for me?
- ✓ Are there symptoms of adhesions that I should watch for as I recover from surgery?

Visit www.womenshealthsolutions.co.uk to learn more about GYNECARE INTERCEED (TC7) Absorbable Adhesion Barrier.

References

Fox Ray NF, Larsen JW, Stillman RJ, Jacobs RJ. Economic impact of hospitalizations for lower abdominal adhesiolysis in the United States in 1988. Surg Gynecol Obstet 1993; 176.

Howard F. The role of laparoscopy in chronic pelvic pain: promise and pitfalls. Obstet Gynecol Surv 1993; 48:357-87.

Kresch AJ, Seifer DB, Sachs LB, Barrese I. Laparoscopy in 100 women with chronic pelvic pain. Obstet Gynecol 1984;64:672-4.

Mathias SD, Kuppermann M, Liberman RF, Lipschutz RC, Steege JF. Chronic pelvic pain: prevalence, health-related quality of life, and economic correlates. Obstet Gynecol 1996; 87: 321-7.

Menzies D. Postoperative adhesions: their treatment and relevance in clinical practice. Ann Rev Coll Surg Engl. 1993; 75: 147-153.

Menzies D, Ellis H. Intestinal obstruction from adhesions-how big is the problem? Ann R Coll Surg Engl 1990; 72: 60-3.

Paul CP. Cited in OBGYN.net - Special Pelvic Pain Symposium Report. April 3-4, 1998.

Ray NF, Denton WG, Thamer M, Henderson SC, Perry S. Abdominal adhesiolysis: inpatient care and expenditures in the United States in 1994. J Am Coll Surg. 1998; 186(1): 1-9.