Summary

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Fortunately for the many women who suffer from endometriosis, new research supports the development of more effective management for this chronic disorder. This supplement featured many interesting and informative presentations and discussions that were heard at the Takeda-sponsored 5th Japan Conference on Endometriosis held on May 18, 2002, in Hakone, Japan. Promising areas of research include combined medical and surgical treatment, optimal positioning for uterosacral nerve ablation, and pretreatment of ovarian endometrial cysts before in-vitro fertilization.

Because neither medical therapy nor surgical therapy alone have been completely satisfactory for treatment of endometriosis-associated infertility and pelvic pain, Professor Jacques Donnez (Universite Catholique de Louvain) reviewed the literature to determine whether combining the two methods would provide effective symptomatic relief. He reported average pregnancy rates of 42% and 50% after combined medical-laparoscopic treatment. Although Professor Donnez cautioned that it may be difficult to reach a consensus, available data strongly support the view that visible endometriosis should be removed, and that GnRH agonists are effective prior to such surgery for moderate and severe endometriosis.

In his second presentation, Professor Donnez summarized current thinking on the histogenesis of peritoneal, ovarian, and rectovaginal endometriosis. He reported that the three different peritoneal lesions, red, black, and white, represent distinct steps in an evolutionary process that is explained by the transplantation theory. Professor Donnez believes that ovarian lesions most likely develop from metaplastic transformation of invaginated epithelial

inclusion cysts from the ovarian epithelial layer, which is originally derived from celomic epithelium. Rectovaginal endometriotic lesions are derived from metaplastic conversion of Müllerian rests into endometriotic glands in the rectovaginal septum. This supplement also includes an article by Professor Donnez's colleague, Dr. Jean Squifflet, on the diagnosis and imaging of adenomyotic disease of the retroperitoneal space.

Dr. Miho Fujii (Sapporo Medical University) used antibodies for specific nerve systems to discover that parasympathetic nerves predominate in the uterosacral ligament, and that sensory nerves comprise only 20% of all nerves in the area. Dr. Fujii showed that the area 2 cm distal to the uterine cervix was the optimal site for uterosacral nerve ablation and that 1.5 cm was the recommended depth for relief of the pain associated with functional dysmenorrhea. This study will be of great help in conducting LUNA or in managing the patient with painful endometriosis, and has also served to clarify the link between endometriosis and pain.

Dr. Mikio Momoeda (University of Tokyo) studied survey results of 1,092 women with confirmed endometriosis to discover that chronic pelvic pain and dyspareunia increased with disease progression. This association persisted regardless of whether the women's chief complaint was pain or infertility. However, because dysmenorrhea was related to disease severity only in the subgroup of infertile women, Dr. Momoeda concluded that dysmenorrhea may be caused by a variety of mechanisms unrelated to endometriosis in women with pain as their chief complaint.

According to Dr. Souichi Yoshida (Tottori University), laparoscopic surgery is an effective treatment for pain relief and restoration of fertility in women with ovarian endometrioma. Dr. Yoshida reported that serum levels of interleukin 6 are significantly higher in those with this common lesion and concluded that serum IL-6 will have important clinical relevance to the management of endometriosis

By reviewing diagnostic and surgical laparoscopic records from 732 infertile women, Dr. Naoyuki Takuma (Asahikawa Medical College) reported that the overall pregnancy rate after diagnostic laparotomy was 40%. Pregnancy rates after surgical laparotomy were 37.9% for complete or incomplete removal; about 50% after incomplete removal; 26.1% after ethanol fixation of the endometrioma, and 70% after ethanol fixation followed by assisted reproductive technology. Dr. Takuma cautions that complete removal of the cyst may damage the ovary.

By analyzing the outcomes of women undergoing in-vitro fertilization with or without cystectomy or aspiration of the ovarian cyst, Dr. Nobuhiko Suganuma (Toyohashi Municipal Hospital) has shown that, although treatment of cysts reduced the number of retrieved oocytes and oocyte quality was not affected by the presence of a cyst, aspiration of the cyst did improve the rate of fertilization. Dr. Suganuma concluded that diagnostic laparoscopic techniques for infertile women could be improved.

Although there is much left to learn about endometriosis, progress has been made in the management of this common disorder. The pain and infertility associated with endometriosis are slowly yielding to new treatments and techniques available to the modern physician. We hope the information presented in this supplement will inspire and motivate physicians to understand and manage the enigmatic disease that is endometriosis.