Comprehensive Reproductive Medicine

1. Staffs and Students (2009)

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2. Purpose of Education

CRM (OB/GY) department has an obligation to offer medical services, education, research as one of the clinical departments in national graduate school, and has duty on making a mutual cooperation with local gynecological institutions.

Our main objectives are

1. Investigation for a new progress in treatment technique
2. Acquisition of medical knowledge and procedure
3. Providing systemic lecture about women's physiological and pathological change during adolescence through senescence.

Aims of research works are focusing on reproductive medicine, perinatal medicine and oncology.

Educational intention in medical doctor course and nursing course includes systemic lectures, clinical conferences and special lecture by many extramural speakers. During Bed-Side Learning period, students should be treated as one of medical stuffs, attend all of deliveries and be present at gynecological procedure. Several OB/GY institutions will be provided as an extramural drills.

3. Research Subjects

Research divisions :

1) Research in physiology, endocrinology and metabolism in the reproductive medicine
2) Research of female physical and mental change with aging
3) Pathophysiological examination of gynecological malignant tumor
4) Clinical research and basic research in perinatal medicine

Available scientific procedures :

1. Cell culture technique of ovarian granulosa cells, endometrial cells, malignant cells, osteoblast and so on.
2. Determination of intracellular calcium (by Fura 2 method and patch clump)
3. Measurement of intra-cellular IP_3
4. Hormonal assay in plasma, urine, follicular fluid (RIA & EIA)
5. Immunohistochemistry with ABC method
6. Analysis of micro-structure with electrical microscopy
7. Determination with molecular biological technique.
8. Physiological determination with isometric tension change
9. Determination of cerebral blood flow with MRI in cerebral infarction
10. Analysis of protein expression with flow cytometry

4. Clinical Services

For intractable sterilization, satisfactory results are obtained with endoscopic examinations and IVF-ET methods. Health care unit for menopausal women was established , where inspections for atherosclerosis, osteoporosis (DEXA), autonomic nervous system are performed, and postmenopausal managements are provided including HRT, mental care and counseling.

After construction of LDR (labor, delivery, recovery) unit, cure for complicated pregnancies is now carried out, and cases of deliveries are rising now.

Malignant gynecological tumor is also an important aim of this department, for which surgery, chemotherapy and radiotherapy with complete cure are applied to patients. For benign tumor and endometriosis, laparoscopic operations are aggressively performed, whose number is now increasing.

5. Publications

Original Article

1. Kawai M, Araragi K, Shimizu Y, Hara Y: Identification of placental leucine aminopeptidase and triton-slowed aminopeptidase N in serum of pregnant women. Clin Chim Acta 2009;400:37-41
2. Obayashi S, Kubota T: Climacteric syndrome as indefinite complaints. J Jp Soc Psychosom Obstet Gynecol 2009;14 (2):183-189
3. Ito E, Obayashi S, Nagai A, Imamura M, Azuma H: Regulation of myometrial contractivity during pregnancy in the rat: potential role for DDAH. Mol Hum Reprod 2009;15(8):507-512
4. Terauchi M, Li JY, Bedi B, Baek KH, Tawfeek H, Galley S, Gilbert L, Nanes MS, Zayzafoon M, Guldberg R, Lamar DL, Singer MA, Lane TF, Kronenberg HM, Weitzmann MN, Pacifici R: T lymphocytes amplify the anabolic activity of parathyroid hormone through Wnt10b signaling. Cell Metab 2009;10(3):229-240
5. Terauchi M, Obayashi S, Akiyoshi M, Kato K, Matsushima E, Kubota T: Insomnia in Japanese peri- and postmenopausal women. Climacteric (in press.)