

Li-Ling Lin 林俐伶
(Y22)



Contamination of ART Culture Media: The Role of Semen and Strategies for Prevention

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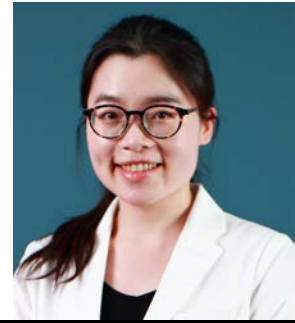
Objective: Microbial contamination of ART culture media is rare but serious. We examined our own experience and conducted a review of the literature with a view to preventing its occurrence and recurrence.

Materials and Methods: We retrospectively reviewed our cases during January 2006 to March 2019 from medical records and telephone interviews.

Result: A total of 12 cases were recorded. The contaminations were caused by semen and were shown to be bacteria that were resistant to the prophylactic antibiotics used in the medium. After the procedures were cancelled due to contaminations, nine husbands received antibiotic treatment, while nine couples changed over to the ICSI program. Eventually, eight couples concluded the study with live birth deliveries, and there was no recurrence of contamination.

Conclusion: ART laboratories should preserve all sperm suspension samples until embryo transfer has been completed for the purpose of checking whether contamination has occurred. In addition to antibiotic treatment, implementation of the ICSI procedure during the next ART cycle has already been proven to be effective. In the future, the zona-removal technique may be considered as another potential option.

Chih-Ling Chen 陳智齡 (Y23)



Prenatal diagnosis of a fetus with HNF1B-associated phenotype in a family with history of renal and metabolic disorders: a case report and mutation update

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Objective: To present a case with prenatal ultrasound imaging of HNF1B-associated phenotype in utero, and to review the current literature.

Case Presentation: A 35-year-old, gravida-3, para-2 woman was pregnant at 21 weeks when level II ultrasound revealed bilateral increased renal echogenicity and normal amniotic fluid level. Her previous birth history included one normal pregnancy and another pregnancy complicated by anhydramnios, and bilateral multiple renal cysts. After taking detailed family history, a NGS renal disease exome panel was performed on the pregnant woman, and a pathogenic missense mutation on the exon 4 of HNF1B was identified.

Results: Sanger sequencing was used to confirm the same point mutation on the fetus, and 2 other family members with renal cysts and diabetes syndrome.

Conclusion: Establishing genotype-phenotype correlations of HNF1B variants may help with risk stratification, and improve genetic counseling and prenatal decision making. The value of prenatal HNF1B screening in congenital abnormal renal development should be explored.

Hung Shen 沈鴻
(Y24)



**Recurrence and risk of Cervical intraepithelial neoplasm 2/3 after treatment:
Follow-up Cohort Study From National database of Taiwan**

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Objective: The incidence of pre-cancerous lesion, cervical intraepithelial neoplasm 2/3(CIN2/3), increased gradually in Taiwan due to the pap smear screening since 1995. We aimed to evaluate the recurrence rate of CIN2/3 after treatment as well as the risk factors of recurrence.

Materials and Methods: We retrospectively identified 11729 women with pathologic diagnosis as CIN2/3 who received LEEP or conization from 2007 to 2016 through Taiwan national cervical cancer screening database. All of the women were followed up at least 3 years. The recurrent rates of CIN 2+ lesions were recorded and analyzed. Risk factors of recurrence including patients age, education status, the frequency of follow-up, and result of serial followed pap smear was analyzed.

Result: There were 328 recurrent women. The overall 5-year cumulative recurrence rate was 2.80%. The recurrent rate within two years after treatment was 60.7%. The multivariate regression analysis found that age more than 50 years old, the abnormal result (\geq ASCUS) of first followed pap smear, and any abnormal pap result (\geq ASCUS) within first year after treatment were the risk factors of recurrence. The education status, frequency of follow-up, or the duration of first followed pap smear did not affect the recurrence.

Conclusion: The 5-year cumulative recurrence rate was 2.80% in our study. Age, the result of first followed pap smear, and the severity of pap smear within first year were the risk factors of recurrence of CIN2/3 women after treatment.

Chia-Yi Lee 李家儀
(Y25)



Outcomes after fertility sparing surgery of early stage ovarian cancer: a nationwide population-based study

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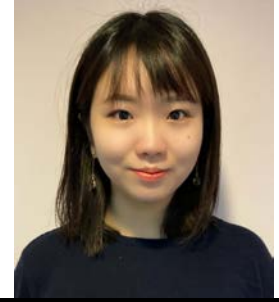
OBJECTIVE: To investigate the outcomes after fertility sparing surgery (FSS) in patients with epithelial ovarian carcinoma (EOC).

MATERIALS AND METHODS: We conducted a cohort study using nationwide Taiwan cancer registry (TCR) system to retrospectively evaluate the data of young patients with early stage EOC from January, 2009 to December, 2017.

RESULTS: A total of 1297 patients were recruited, including 398 patients undergoing FSS while 899 patients undergoing comprehensive staging surgery (CSS). The median age of patients was 38 years (range, 20-44 years). The majority of the patients had stage I disease (88.9%, 1153/1297). Endometrioid carcinoma (28.9%, 375/1297) and mucinous carcinoma (28.1%, 365/1297) were the two most common cell types, yet 25.4% (329/1297) of patients had clear cell carcinoma. Overall, FSS did not significantly influence the overall survival (OS) and cancer-specific survival (CSS) comparing to CSS (HR 1.21, 95% CI 0.73-1.98, p=0.44). However, patients with endometrioid carcinoma were less feasible to FSS comparing to the other histologies (HR 3.6, 95% CI 1.21-10.14, p=0.017).

CONCLUSIONS: Fertility sparing surgery of early EOC could be considered as an alternative method for those who had the desire for pregnancy. However, patients must receive a detailed consultation before surgery and regular postoperative surveillance.

Wen-Pu Chang 張文樸
(Y26)



Ovarian Carcinosarcoma: Experience of a single institution and review of literature

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Background: Ovarian carcinosarcoma is a distinct entity of ovarian cancer with dismal outcome. Due to the rarity of the disease, there is limited evidence on prognostic factors regarding survival, as there is no consensus on standard treatment strategies.

Methods and material: A single-institution, retrospective analysis of women diagnosed with ovarian carcinosarcoma from June 2011 to September 2020. Data and demographic information were extracted from electronic medical records of Taipei Veterans General Hospital. The Kaplan-Meier method was used to generate overall survival and progression free survival. Factors predictive of outcome were compared using the log-rank test and Cox proportional hazards model.

Results: Seventeen women with ovarian carcinosarcoma were identified. The median age at diagnosis is 64 years. Fifteen patients (88.2%) presented with FIGO stage III or IV. Four patients (23.5%) were found to have retroperitoneal lymph node metastasis. Thirteen patients (76.4%) had homologous sarcomatous component. Ten patients (58.8%) received optimal cytoreduction surgery and fourteen patients (82.3%) received lymphadenectomy. Sixteen patients received platinum based chemotherapy. The median overall survival was 9.8 months and median progression-free survival was 5.2 months. Among patients with advance-staged disease, retroperitoneal lymph node involvement was associated with a worse median overall survival (16.6 months versus 3.9 months; $P=0.012$). Lymphadenectomy was associated with better survival among advance-staged patients (9.8 months versus 2.2 months; $P=0.001$). There was no difference on survival based on age of diagnosis, cytoreduction status, or sarcomatous component.

Conclusion: The demographic picture and disease nature of ovarian carcinosarcoma differ from other ovarian cancers. Poorer survival was found in patients with retroperitoneal lymph node involvement while better survival was found in those received comprehensive lymphadenectomy. This study should warrant the importance of lymph node involvement and the role of surgical lymph node dissection in ovarian carcinosarcoma.