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## Editorial

## Outstanding research paper awards of the 2018 *Taiwanese Journal of Obstetrics and Gynecology*



In this May issue of the journal, we are glad to introduce the winners of the 2018 *Taiwanese Journal of Obstetrics and Gynecology* (TJOG) *Outstanding Research Paper Award*. The awards were selected from all research papers published in the 2018 print issues of the TJOG, and only two articles obtained this award. The golden winner is Dr. Lin's work from the Mackay Memorial Hospital and their paper is entitled "Higher male prevalence of chromosomal mosaicism detected by amniocentesis" [1]. The silver winner comes from Dr. Lin in the Taipei Veterans General Hospital, whose article is entitled "Postoperative maintenance levonorgestrel-releasing intrauterine system for symptomatic uterine adenomyoma" [2]. Both winners received their honors at the *Annual Meeting of the Taiwan Association of Obstetrics and Gynecology* (TAOG) on March 9 and 10, 2019, held in Tainan, Taiwan.

Dr. Lin, Chen-Ju conducted a 10-years retrospective study to present the calculated frequencies, male-to-female sex ratio, and modes of ascertainment in different levels (level I, II, and III) of chromosomal mosaicism detected at amniocentesis ( $n = 13,752$ ) [1]. The calculated frequency rate was 4.09% ( $n = 562$ ), 1.51% ( $n = 207$ ), and 0.47% ( $n = 65$ ) in the level I, II, and III, respectively [1]. There is no statistically significant difference of the frequency rate among the different indication for amniocentesis, such as advanced maternal age, absence of abnormal ultrasound findings or others [1]. However, it is interesting to find that the prevalence of chromosomal mosaicism in the level II and III was sex-related, and male fetuses are frequently found, supporting the theory of better survival in male embryo [1], and subsequently slight excess of male live births [3]. This novel finding is worthy of discussion.

Prenatal diagnosis is very important, not only for curable disease but also for lethal disease [4]. The former could improve the outcome of delivery newborns, and the latter could help couples to make a decision [5]. Although the non-invasive prenatal testing (NIPT) becomes more and more popular in the recent decades, the value of amniocentesis is never underestimated [6–8]. Gross karyotyping and detailed chromosomal examinations by array comparative genomic hybridization analysis, fluorescence in situ hybridization, and others are needed to confirm the diagnosis by NIPT [5,9]. Chromosomal mosaicism derived from a variety of mechanisms including chromosome non-disjunction, anaphase lagging or endoreplication and contributed to genetic abnormalities, miscarriages, stillbirths or live births with and without congenital anomaly [10]. Since male-to-female ratio is naturally higher than 1, if no external force is added, it is rationale to find the higher male-to-female ratio during amniocentesis, regardless of normal or abnormal karyotype (chromosomal mosaicism was included).

The other article by Lin CJ et al. addressed the topic about the treatment of women with symptomatic uterine adenomyoma [2],

which is also a biggest challenge in clinical practice, partly because the disease results in a large socio-economic burden, including sub-fertility, sexuality, and others, and partly because it is hard to treat without definite destructive hysterectomy [11,12]. However, this disease often attacks women during reproductive age (golden period); therefore many strategies have been available either using alone or combining with others. All would like to preserve the uterus, although the therapeutic effect is short or the treatment cannot be maintained because of poor compliance and/or unwanted side effects [13,14]. Dr. Lin and colleagues performed a conservative surgery for the patients with adenomyosis and/or adenomyoma and following maintenance of levonorgestrel-releasing intrauterine system (LNG-IUS) to get a long-term therapeutic effect. The most importance is that the compliance of the patients is relatively good (more than 2 years) and more than half of patients were satisfied with this combination therapy. The current study suggested that the postoperative adjuvant hormone therapy provide the better and long-term symptom control. In fact, evidence shows that combination therapy, such as postoperative adjuvant hormone therapy after conservative surgery might be a choice of therapy in this-type complicated disease, not only for symptom control but also for future fertility [2,15–19].

Finally, as a Deputy Editor (Dr. Wang) and an Editor-in-Chief (Dr. Chen) of the TJOG and a president (Dr. Kuo) of the *Taiwan Association of Obstetrics and Gynecology*, we are pleased to congratulate both doctors on their winning of the *Outstanding Research Article Award*. We believe that the authors' or readers' continuing contribution and efforts will provide an excellent and perfect women's health care.

### Conflicts of interest

All authors declare no conflict of interest.

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