

## LETTER

Conception in women with primary  
Sjögren's diseaseGrégoire Martin de Frémont <sup>1</sup>, Véronique Le Guern,<sup>2</sup> Raphaele Seror <sup>1,3</sup>

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In women with primary Sjögren's disease (pSD), reproduction can be affected by impaired sexuality secondary to mucosal dryness. Concerns about a high risk of spontaneous miscarriage as an adverse pregnancy outcome and as a cause of frequent use of assisted reproductive techniques (ART) have been raised by several studies, however, limited by their retrospective design and lack of an appropriate control group.<sup>1,2</sup>

In a recent study published in *RMD Open* by Zhen Tan *et al*<sup>3</sup>, the authors report, in a retrospective study comparing 164 women with pSD (mean age of 32 years) to 328 matched controls, higher use of ART (22.56% vs 0.91%,  $p < 0.001$ ) and a higher rate of spontaneous miscarriage (12.80% vs 1.52%,  $p < 0.001$ ) in women with pSD. They conclude that natural conception might pose greater challenges for these women.

These findings do not align with prospective data on pSD pregnancies and on women in the general population. Indeed, in a French prospective cohort of 106 pregnancies in women with pSD, 10% were induced by ART with a median maternal age of 33 years at pregnancy onset.<sup>4</sup> In an Italian prospective cohort including 41 pregnancies in women with pSD, the number was even lower, as only 2.4% of pregnancies were induced by ART while women had a median age of 36 years at inclusion.<sup>5</sup> In the French general population, evaluated every 5–6 years with a perinatal survey recording data on all births in France over a week (*Enquête Nationale Périnatale*, ENP, <https://enp.inserm.fr/docutheque/les-rapports-des-enp/>), the use of ART was stable during the last decade, ranging between 5.7% and 6.9%, a much higher frequency than in Tan *et al.*'s control group.

Regarding miscarriage, to assess and compare between-group differences for this outcome, both groups should have a prospective preconceptional follow-up. Indeed, miscarriages in women with an autoimmune disorder, because of their close medical

follow-up, are more likely to be recorded, especially for early events and, on the contrary, are more likely to be missed in healthy women, especially if they happen early on and do not need medical attention. Consequently, when Tan *et al* found an earlier occurrence of spontaneous miscarriage in women with pSD (69.50±42.33 vs 155.43±30.48 gestational days), this may reflect the reporting bias that leads to underestimating miscarriage in the control group. Indeed, the overall estimated risk of miscarriage in the general population is 15.3% (95% CI 12.5% to 18.7%),<sup>6</sup> whereas control groups in studies on pSD have much lower percentages.<sup>1–3</sup> Additional factors should also be considered to mitigate Tan *et al.*'s conclusion on women with pSD: both the significant number of patients with antiphospholipid antibodies (13.25%), as well as the high use of ART, can have increased the risk of miscarriage.

Hasty conclusions regarding potential conception challenges in women with pSD should be avoided based on the existing literature. Future efforts to study that open question should focus on setting up prospective and preconceptional follow-ups for both cases and controls to ensure reliable between-group comparison.

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**REFERENCES**

- 1 Singh M, Wambua S, Lee SI, *et al.* Autoimmune diseases and adverse pregnancy outcomes: an umbrella review. *BMC Med* 2024;22:94.
- 2 Lao M, Luo G, Dai P, *et al.* Pregnancy Outcomes in Patients with Primary Sjögren's Syndrome Undergoing Assisted Reproductive Therapy: A Multi-center Retrospective Study. *Rheumatol Ther* 2023;10:1725–39.
- 3 Tan Z, Shao M, Zhou Y, *et al.* Increased risk of adverse gestational outcomes in pregnant women with primary Sjögren's syndrome. *RMD Open* 2024;10:e003616.
- 4 de Frémont GM, Costedoat-Chalumeau N, Lazaro E, *et al.* Pregnancy outcomes in women with primary Sjögren's syndrome: an analysis of data from the multicentre, prospective, GR2 study. *Lancet Rheumatol* 2023;5:e330–40.
- 5 Andreoli L, Gerardi MC, Gerosa M, *et al.* Management of pregnancy in autoimmune rheumatic diseases: maternal disease course, gestational and neonatal outcomes and use of medications in the prospective Italian P-RHEUM.it study. *RMD Open* 2024;10:e004091.
- 6 Quenby S, Gallos ID, Dhillon-Smith RK, *et al.* Miscarriage matters: the epidemiological, physical, psychological, and economic costs of early pregnancy loss. *Lancet* 2021;397:1658–67.