increased risk for serious infections during the first year of life [18]. The only concern about vaccinations is about live vaccines; it is recommended to postpone these vaccinations after 4-6 months after the last administration of drug during pregnancy.

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SP0149 ASSISTED REPRODUCTION TECHNIQUES: WHAT CAN WE TELL TO WOMEN WITH RHEUMATIC DISEASES?

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Assisted medical procreation includes all the techniques based on the manipulation of reproductive cells that will allow infertile couples to conceive a child. Main techniques are ovulation induction with or without intrauterine insemination, controlled ovarian stimulation and in vitro fertilization (IVF).

Intrauterine insemination: sperm (from partner or donor) is inserted directly into woman's cervix, or uterus at the time of ovulation.

Controlled ovarian stimulation is aimed at stimulate ovarian to allow egg retrieval few hours later. Protocols usually include gonadotropin-releasing hormone agonist or antagonists associated with recombinant follicle-stimulating hormone (with concomitant close ovarian monitoring).

Controlled ovarian stimulation is generally followed by egg retrieval and then by IVF, which is performed in the laboratory by putting into contact collected oocytes with sperm (partner or donor). Intracytoplasmic sperm injection (ICSI) is performed in case of inadequate quality of the partner's sperm (oligospermia notably). One or 2 embryos are transferred in utero 2/3 or 5 days later (or during the next cycle), while other good quality embryos are cryopreserved for later use. There is no difference in the rates of ongoing pregnancy between transfers of frozen or fresh embryos [1].

By definition, an IVF procedure is defined by the transvaginal egg retrieval: even if the X obtained embryos are implanted Y times, this is still counted as the same procedure. A retrospective study of 14,469 women undergoing IVF, found that the cumulative live birth rates by procedure steadily increased with the number of collected oocytes, reaching 70% when ≥ 25 oocytes had been retrieved [2].

Women with auto-immune diseases or inflammatory chronic rheumatism may have infertility as in the general population or because of previous gonadotoxic treatment as cyclophosphamide. While artificial inseminations and oocyte or embryo donations can be considered equivalent to a natural conception in terms of risk, particular attention is needed during IVF in women with systemic lupus erythematosus (SLE), antiphospholipid syndrome (APS) and/or biology (APL) because of the increased level of estradiol after ovarian stimulation (risk of lupus flare and of thrombosis) [3].

Ovulation induction treatments with in vitro fertilization can be safely used in patients with SLE with stable/inactive disease [4]. Similarly, women with rheumatoid arthritis or spondyloarthritis can undergo IVF safely. In case of APS or APL, an adaptation of the treatment is usually required, especially around the egg retrieval. Management of pregnancy (both treatment and monitoring) must be planned before IVF [4].

As for a natural pregnancy, pre-counselling is important to adapt the treatment (interruption of contraindicated drugs in pregnancy as mycophenolate mofetil or

methotrexate before conception due to their potential teratogenicity or at the end of the second trimester for anti TNF agents) [4]. Some treatments, especially hydroxychloroquine in SLE, have to be maintained during all this period and during pregnancy. In women with APS or APL, prophylactic dose of low weight molecular heparin (LWMH) is recommended during the period of stimulation. In case of treatment with coumadin, switch for curative LWMH is needed. In both cases, short interruption is required for the oocyte puncture. Low dose of aspirin is added after the embryo implantation. Folic supplement is recommended, especially in cases of recent treatment with methotrexate of current treatment with sulfasalazine. Immunizations are also important.

Given its potential to reduce the miscarriage rate, LT4 supplementation is recommended for infertile women with subclinical hypothyroidism or thyroid autoimmunity who are undergoing IVF [5].

Finally, a key role of inflammatory immune response has been shown in reproductive failures but a recent meta-analysis did not find any positive effect of immunotherapy (especially anti-TNF) in improving the live birth rate in women undergoing IVF treatment [6].

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SP0150 THE IMPACT OF RHEUMATIC DISEASES AND ANTI-RHEUMATIC DRUGS ON MALE FERTILITY IN ADULT AND YOUNG PEOPLE

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Background: The chronic, systemic inflammation in rheumatic diseases can impair male fertility by direct effects on the gonads or by affecting the hypothalamic-pituitary-gonadal (HPG) axis resulting in hypogonadism. Impaired gonadal function is reflected by reduced sperm quality and sometimes lowered testosterone levels. Drugs may impair fertility by impairing spermatogenesis or interfere with the HPG axis.

Objectives: To summarize the knowledge on the impact of rheumatic disease and its therapy on fertility in adult and pediatric patients

Methods: Search of the literature

Results: No impairment of spermatogenesis has been shown for azathioprine, cyclosporine, and mycophenolate mofetil. Risk of permanent infertility is associated with cytotoxic drugs, particularly the alkylating agent cyclophosphamide. Effects of methotrexate (MTX) on male fertility are related to dose. There is no indication that low-dose MTX 5 – 25 mg/week impairs male fertility. Case reports of men with psoriasis treated with low-dose MTX have either found completely normal sperm quality or detected oligo- and azoospermia.

Cyclophosphamide (CYC) is administered to adult and pediatric patients with systemic lupus erythematosus, other connective tissue disease and vasculitides. Gonadal damage by CYC is dose-dependent revealed by oligo- and azoospermia