Abstract

The incidence of premature ovarian failure (POF) is around 1 to 3%. This pathology occurs in young women, who often wish to become pregnant. Theoretically, two mechanisms could be involved: initial follicle depletion and follicle dysfunction. However, in some cases, mixed mechanisms are involved. Initially, PFO was considered irreversible. In fact, signs of intermittent ovarian function in normal karyotypically women have been described, but predicting the probability of spontaneous remission in a specific woman is impossible. Therefore, various treatments for ovulation induction have been proposed to these patients. Most of the pregnancies occur after hormone replacement therapy. The action of this treatment is unclear and the cause-and-effect relation has not been proven by prospective, randomized studies. The benefit of suppressing endogenous gonadotropins by GnRH agonists is not proven either. Estrogen supplementation and high-dose gonadotropin ovarian stimulation protocols have been proposed. Even so, this therapy cannot be recommended because of the lack of controlled studies. Finally, numerous case reports have described the return of ovarian function after using immunosuppressive therapies. The lack of particular criteria for the diagnosis of autoimmune mechanisms has lead to treat heterogeneous groups of patients. No randomized controlled studies with immunologic monitoring have been performed that could establish the success of this therapy. Therefore, in order to find effective treatments, basic pathophysiological mechanisms must be better understood. For those women who want to become pregnant, the lack of prospective, randomized studies cannot lead to formal conclusions. Depending on the patients' age and history, it appears reasonable to attempt a corrective therapy based on defined etiology, before entering in a donor oocyte program.