

The Use of Frozen-thawed Spermatozoa Obtained from Alloplastic Spermatocele for Intracytoplasmic Sperm Injection

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Abstract: This present study investigated the effectiveness of intracytoplasmic sperm injection (ICSI) using cryopreserved spermatozoa aspirated from alloplastic spermatocele for the treatment of 2 couples that were infertile due to obstructive azoospermia (case 1) and the emissional disorder (case 2). In case 1, the azoospermic condition was caused by previous inguinal herniorrhaphy and in case 2, the emissional disorder was caused by previous retroperitoneal lymphnode dissection for the treatment of testicular tumors. The rates of fertilization and cleavage were 100% and 100%, respectively for case 1 and 42% and 21% for case 2, after ICSI with frozen-thawed alloplastic spermatocele spermatozoa. Healthy babies were born from both wives. This clinical investigation indicates that ICSI with frozen-thawed alloplastic spermatocele sperm is an alternative treatment for infertile couples with obstructive azoospermia or emissional disorder as male factors.

Key words: alloplastic spermatocele, sperm cryopreservation, ICSI, male factor infertility.

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Introduction

A significant number of infertile men demonstrate conditions that prevent transport of spermatozoa from the somniferous tubules to the ejaculate, including congenital absence, atresia or dysplasia of the vas deferens, failed attempts at reconstruction of the vas deferens or epididymovasostomy, or ejaculation owing to retroperitoneal surgical dissection. Pamerol and Marina¹⁾ reported that 48 percent of cases of azoosper-

mia were caused by congenital anomalies of the genital tract. If both the congenital absence of ejaculatory ducts and/or an extensive segment of the vas deferentia and the acquired damages that make a reconstructive operation of the seminal pathway impossible are considered, there is a large number of patients in whom the possibility of recovering fecundity involves only the creation of a spermatocele for the retention of spermatozoa followed by intrauterine insemination (IUI). Hanley²⁾ first created a spermatocele by mak-