functional sperm parameters). Stepwise multiple regression analysis on all of the parameters (male and female) yielded two estimation curves only related to non sperm parameters:

PRICSI=1.608412-0.036848*AGE-0.046633*DURA (AGE=years of age of the female; DURA=duration of infertility in years)

IRICSI=0.609082-0.017673*AGE

Conclusion: individualization of expected pregnancy rates and implantation rates for IVF and ICSI is possible; the estimation curves should be made for each centre; ICSI curves are not related to any sperm parameter.

45. Y-deletions and ICSI: from gene to clinic.

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The introduction of ICSI offered a successful treatment option for severe male subfertility, although the etiology of the disorder remains unclear in most cases. Recently, microdeletions in the AZF-region of the Y chromosome have been detected in men with azoospermia or severe oligospermia.

In this study we investigated the prevalence of microdeletions in the AZFc-region of the Y chromosome in our ICSI-population (by PCR analysis) and looked for clinical differences between the men with and without the deletion.

Blood was drawn from 154 men, who were waiting for ICSI treatment: 24 azoospermic men, 98 oligospermic and 32 normospermic men (after previous fertilization failure). Chromosome analysis showed 4 Klinefelters in the azoospermic group and 2 Klinefelters in the oligospermic group. One translocation was observed in the oligospermic group.

Microdeletions in the AZFc region were present in 7 of the 98 oligospermic men (7%). None of these 7 men had abnormal findings on andrologic history and examination. No microdeletions were found in the azoospermic and normospermic group.

We conclude that microdeletions in the AZFc-region of the Y-chromosome are frequently found in men with severe oligospermia. Therefore, we recommend DNA-screening (and genetic counseling) to all ICSI-men.

46. Vasectomy, vasovasostomy and MESA/ ICSI: is it the future triad of vasectomised man who regrets vasectomy?

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Introduction: We studied the pregnancy and patency rate of our micro-surgical and our MESA/ICSI treatments to evaluate the future roll of the micro-manipulation and vasovasostomy in the case of vasectomized man.

Patients and methods: A number of 84 men underwent vasovasostomy. The hormonal state of FSH, LH and testosterone were studied. Two layer technique as described by Silber was used. Testis biopsies were taken peroperatively. Semen analysis occurred per 3 months post-operatively during one year. Six months after the operation the data were refreshed.

Results: Nine men didn't cooperate to examine the semen. The patency of the vas was reversed at 75% (56/75) of the cases. Six patients lost their child wish. The number of 69 patients were divided in three groups: group A; (fertile group) n=21 (30%) with average spermatozoa counts (ASC) of 37±19 (12-82) X10^6/ml, group B; (subfertile group) n=29 (42%) with ASC of 20±21 (1-79) X10^6/ml and an azoospermic group C, n= 19 (28%). Ten couples from group C were treated by MESA/ICSI. Seven healthy children have been already born. Since 1-4-1996 MESA-treatments were stopped in the Netherlands. There was a significant difference between group A and B (only) in the sperm counts ($P<0.05$). A, B and C were not statistically significant different concerning the hormonal state and the testis biopsies score. The interval between the vasectomy and the vasovasostomy was 10.8±4.1 and 6.7±2.5 years in azoospermic respectively fertile group ($p=0.001$).

Conclusions: MESA/ ICSI (efficacy 70%) is a powerful tool in case of vasectomised and then vasovasostomized men when azoospermia persists.

47. Testis-specific histone 2B in human spermatozoa

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During the first part of mammalian spermatogenesis, somatic type histones are partly replaced by testis-specific histone variants. In spermatids, the histones are replaced by transition proteins and subsequently by protamines, which allow sperm nuclear condensation. In contrast to other species, in mature sperm of the human about 10% of the histones are still present. The aim of the present study was to determine the expression of testis-specific histone 2B (TH2B) in human testis tissue, and to establish the concentration of TH2B in ejaculated spermatozoa of patients visiting our andrology clinic. In histological sections of testicular biopsies, spermatocytes, and round and elongating spermatids immunoreacted strongly with an antibody targeting TH2B. Also, spermatozoa obtained from semen immunostained, when decondensed to make the nuclear proteins accessible to the antibody. There was, however, a remarkable intercellular variability in the intensity of staining of spermatozoa within one ejaculate. Immunoblotting of sperm proteins confirmed the presence of TH2B, and indicated that also the mean concentration of TH2B in spermatozoa varies among patients. The biological and clinical significance of the TH2B level in human spermatozoa is currently being investigated.

48. Identification of pro-nerve growth factor in rat round spermatids: potential role as a trophic factor in the maintenance of Sertoli cell viability.

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A nerve growth factor (NGF) immunoreactive protein expressed by round spermatids (RS) is thought to interact with NGF