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Absence of a Sperm Coating Protein after Epididymovasostomy Report of One Case

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Studies in animals indicate that epididymal sperm maturation requires the secretion of an epididymal protein that binds to the sperm surface. The possibility that this also occurs in man has been explored in the present study of one patient who was treated for bilateral obstruction of the cauda epididymis by epididymovasostomy. The patient's ejaculates obtained up to 18 months after surgery contained immotile sperm. Analysis of proteins in the seminal plasma revealed that the semen was deficient in a 38,000 dalton protein found in seminal plasma of normal fertile men and in epididymal cytosol of patients with carcinoma of the prostate. This 38,000 dalton protein also was found in sperm of normal men, but was absent in sperm of the patient. This observation supports the possibility that an epididymal protein coats the sperm surface during epididymal transit in man as well as in numerous other species.

Key words: human epididymis, specific proteins, sperm motility, epididymovasostomy

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