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## RESULTS

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ABSTRACT

The proteins which form disulfide bonds during sperm maturation are identified by carboxymethylation with labelled iodoacetate or iodoacetamide, extraction of proteins by cetyltrimethyl ammoniumbromide, polyacrylamide gel electrophoresis, autoradiography and densitometry coupled with radioactivity pattern analysis. These proteins include those of molecular weights 63,000; 32,000; 22,000; 12,000 and 8,000 daltons. By using sucrose density gradient all of these proteins except the 8,000 daltons are found to be located at sperm tail. Iodination techniques are also performed to localize all of these proteins on sperm surface. Iodoacetate cannot be incorporated into the sperm as much as iodoacetamide. The protein of molecular weight 32,000 daltons also shows a great difference between iodoacetate and iodoacetamide incorporation. Caput sperm that are carboxymethylated with iodoacetate will change the morphology in two hours and the sperm proteins can be lost easily.