Some aspects of stallion epididymal sperm maturation

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It is clear at present that important maturation changes take place in spermatozoa in the epididymis, and that these changes confer on the sperm the ability to fertilize eggs. This process has been scarcely analyzed in the stallion. Epididymal stallion sperm during the breeding season were studied in terms of membrane functionality (as revealed by the hypo-osmotic test), acrosomic reaction (AR), recognized by the triple staining technique, and conditions to induce it "in vitro". Motility and hypo-osmotic reactivity progress caudally and may be considered as maturational characteristics. Spontaneous AR is seen only in cauda (4-7%). AR can be experimented "in vitro" without noticeable loss of sperm motility before 6 hs of incubation in HAM F-10 medium containing 3.0% bovine serum albumin and 50 ?g/ml of lysophosphatidyl choline added in the last 15 minutes. This set of conditions would be useful to assay more efficiently the fertilizing ability of stallion sperm, using the hamster penetr