Calpain activity & sperm penetration assay in unexplained infertile man

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Abstract

- Association of sperm calpain, a calcium dependent protease, with cell fusion and signal transduction processes can take place during penetration of the oocyte.
- This experiments were done to examine the sperm function, sperm penetration assay parameters and to assess the effects of calpain on the fertilization capacity.
- The study was carried out on infertile men especially the unexplained ones as well as fertile men through assisted reproductive technologies like ICSI and IVF, and using hamster oocytes as a model for human.
- The results show a highly significant difference in calpain activity parameters between the 2 groups and not very significant within the same group.
- It was concluded that high calpain activity is associated with high sperm function and penetration parameters indicating high potential of oocyte fertilization.