

Heat stress impairs kinetics and morphology of epididymal sperm in rams (*Ovis aries*)

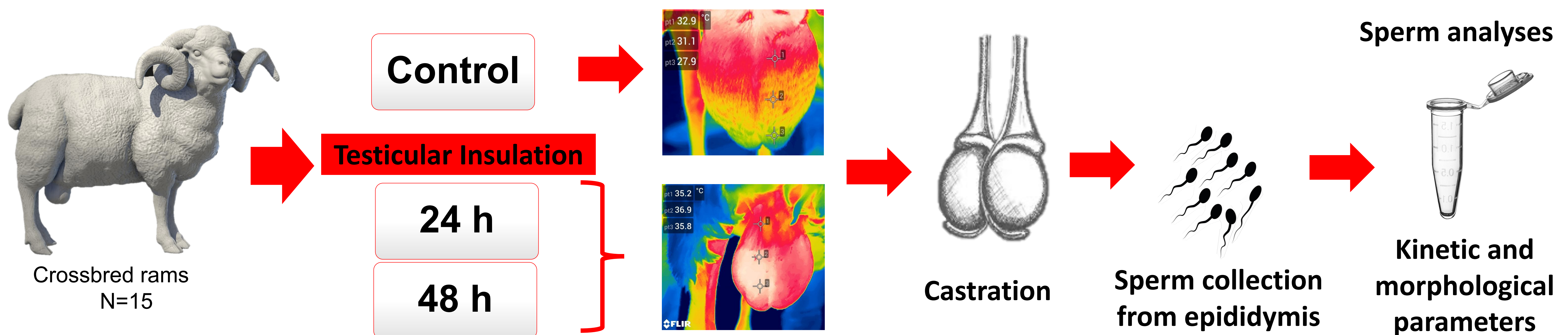
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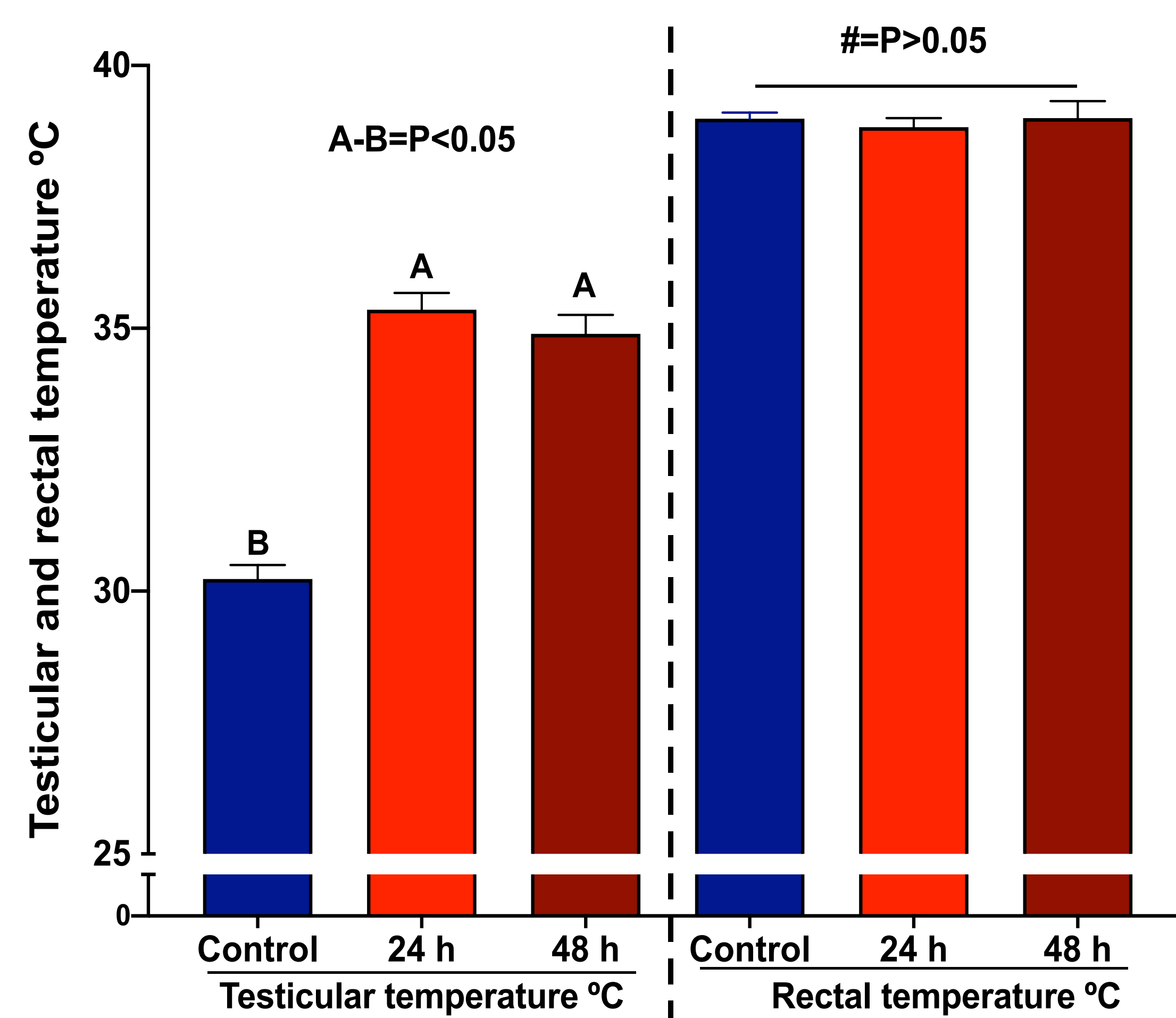
Mammalian testes is physiologically 3 - 5 °C below body core, such difference is fundamental for proper spermatogenesis. Therefore, heat stress (HS) can lead to severe impairment in sperm quality. Spermatids and spermatocytes are the most impacted cell types by HS, however, little is known about immediate impacts of HS in the sperm cells stored in the epididymis. **Therefore, the objective was to Investigate impacts of testicular (HS) on kinetics and morphology of epididymal ovine sperm.**

Methods

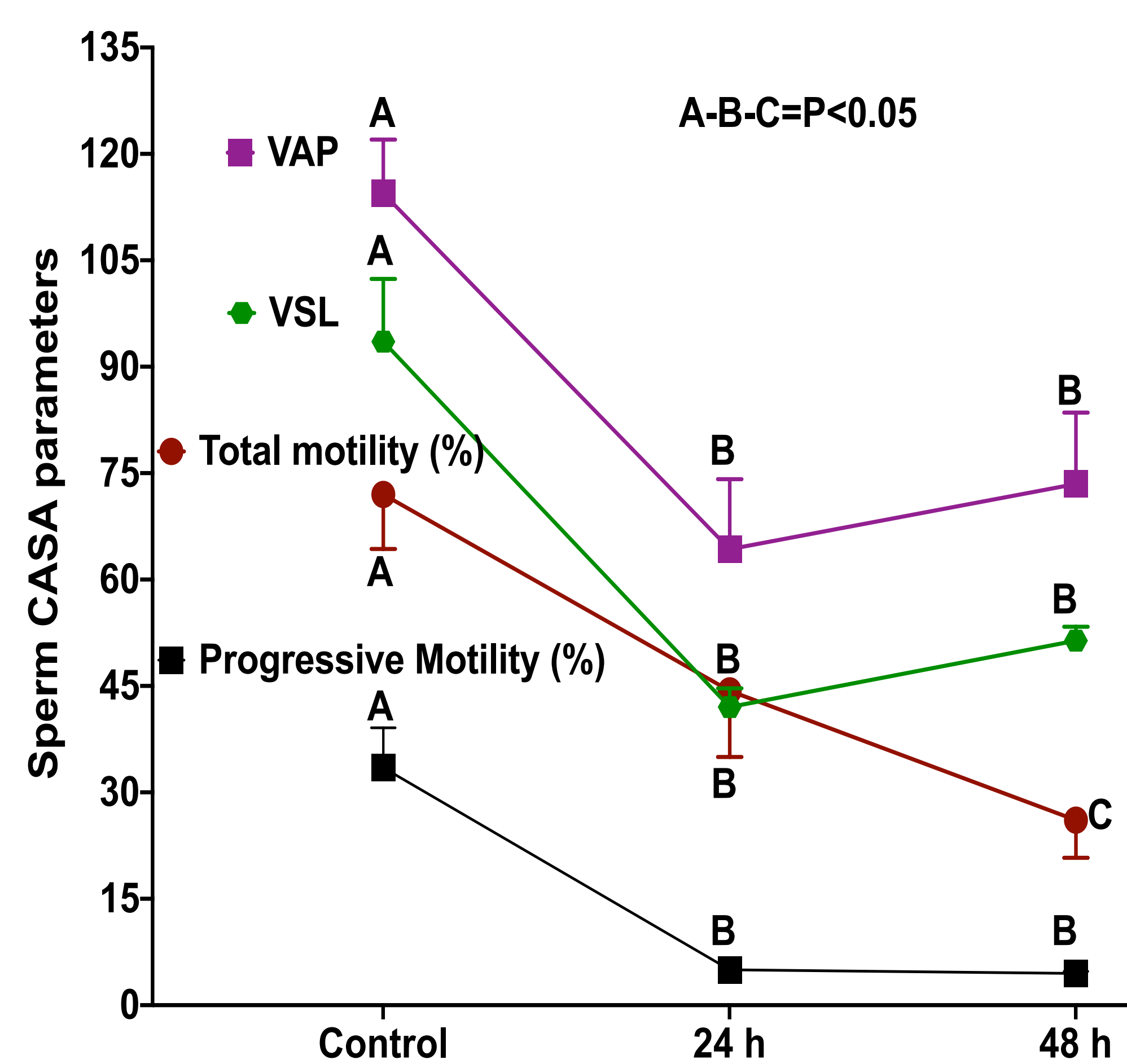


Results

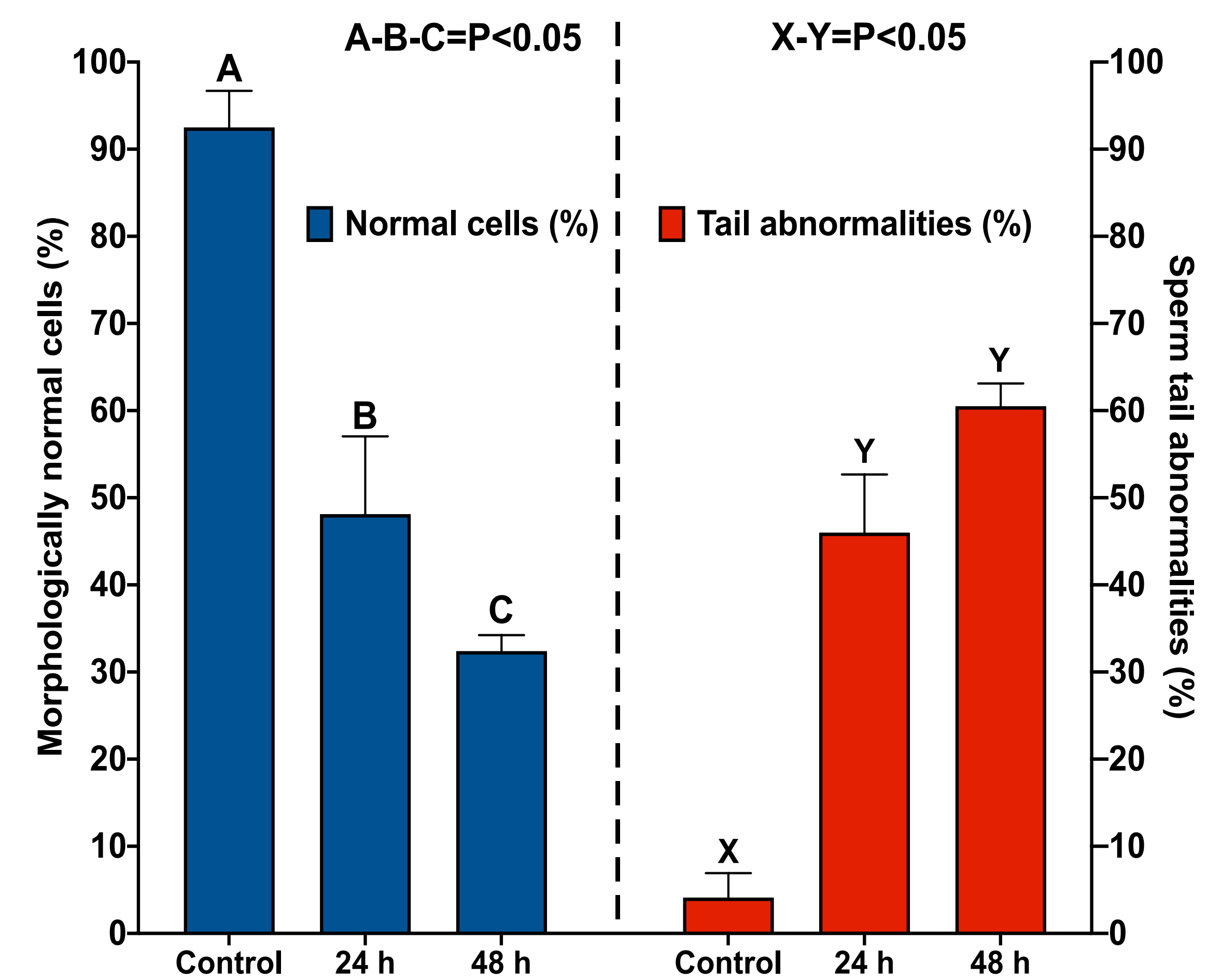
Insulation caused increase in testicular T_o, with no impact to body T_o



Severe reduction in sperm kinetics observed from 24 h onwards



Reduction in morphologically normal cells, followed by an increase in tail abnormalities (%)



Conclusion

Short-term scrotal insulation in rams had a rapid and severe adverse impact on kinetics and morphology of epididymal sperm.

Acknowledgments