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Title:EXPRESSION OF IGF2R, IGF2, TGF, AND uPAR IN A RAT MODEL OF OBESITY

We hypothesized that decreases in capillary density observed in obesity was in part due to changes in the levels of insulin growth factor 2 receptor (IGF2R), insulin growth factor 2 (IGF2), urokinase-plasminogen receptor (uPAR), and transforming growth factor beta (TGFB). In this model, IGF2R and TGFB would increase, while uPAR and IGF2 would decrease, resulting in a contribution to capillarity decrease. We observed capillarity decrease in our animals, but did not find any significant differences in these four factors. We find our animal model a good subject for studying capillarity change in obesity, but that the IGF2R complex and factors it regulates do not change in an anti-angiogenic fashion during obesity. We suggest that other mechanisms may be responsible for capillarity changes in obesity.