

9: Adv Exp Med Biol 1997;428:115-22

In vivo investigations of vascular density and local mitochondrial metabolism after irradiation.

Plasswilm L, Hoper J.

Klinik und Poliklinik für Strahlentherapie, Universität Erlangen-Nürnberg, Germany.

It is obvious that irradiation increases local oxygen uptake. Because the oxygen supply is not altered, a decrease in local oxygen partial pressure may develop. This state may be called relative hypoxia. If the metabolism is altered for a period of at least 24 hrs an increase in angiogenic mitogens, inducing angiogenesis will occur. Presumably this is the mechanism underlying the therapeutic effect of radiotherapy in benign disease.

PMID: 9500036 [PubMed - indexed for MEDLINE]