

Abstracts

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Utility of TNF based isolated limb perfusion to avoid amputation State of art and the future



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Isolated limb perfusion (ILP) with melphalan alone is effective in the treatment of small multiple melanoma intransit metastases and is utilized widely for this indication. The treatment is much less effective against bulky melanoma metastases and has uniformly failed in the treatment of irresectable extremity soft tissue sarcomas. The addition of Tumor Necrosis Factor-alpha has changed this situation dramatically. High response rates and limb salvage rates have been reported in a multicenter TNF and melphalan trials, that resulted in the approval of TNF for this indication in Europe. Subsequently many centers in Europe have been trained and a series of confirmatory single institutions reports on the efficacy of the procedure have been published now. TNF has an early and a late effect: It enhances tumor-selective drug uptake during the perfusion and plays an essential role in the subsequent selective destruction of the tumor vasculature. Together this results in high response rates in bulky tumors, soft tissue sarcomas, bulky melanomas, and various other tumor types. This induction therapy allows for resection of tumor remnants some 3 months after ILP and thus plays an essential role to avoid amputation of the limb. TNF-based ILP is a well established treatment to avoid amputations regardless of tumor size and tumor type. It represents an important example of tumor vasculature-modulating combination therapy and a should be offered in large volume tertiary referral centers.