

Intratumoral chemotherapy (ITC) as adjunct to standard therapy in NSCLC iiiia-iv prolongs life

Wolfgang Hohenforst-Schmidt

Coburg Klinik, Germany

The efficacy of conventional intravenous cancer chemotherapy is severely limited by systemic drug toxicity. Statistics for the past 20 years indicate little progress in reducing cancer mortality except for distinctive genetically defined subtypes. Reported here are studies showing the efficacy of *intratumoral chemotherapy* (ITC) as a debulking tool in central tumors applied worldwide in more than 370 published patients over the last decade. ITC has already shown in few observational studies that a surplus of median survival can be achieved if this method is as an adjunct to standard options like reduced intravenous chemotherapy, external or internal radiotherapy even in patients with poor performance status: Cancer drugs are injected directly into the tumor for central tumors or transthoracically for peripheral cancer site and by an EBUS-system for involved mediastinal lymph nodes. In more than 60 published patients (inoperable IIIa – IV) a surplus of up to 77% in median survival (MS) in comparison to expected MS according to UICC 7 data was achieved when ITC was used as an adjunct to standard therapy. Superdoses of cytotoxic drugs may thereby accomplish rapid tumor cell killing without systemic toxic complications but also involved lymph nodes - in many studies the hallmark of local recurrence - could be treated directly and specifically. This new paradigm promises to significantly reduce lung cancer morbidity and mortality without the toxic complications associated with conventional systemic chemotherapy. It maybe not only considered in palliative situations but also as preoperative therapy according to the results in animal studies.

Biography

Dr. Wolfgang Hohenforst-Schmidt works as a senior physician executive in the field of interventional pulmonology including chest oncology, interventional cardiology and intensive care medicine since more than one decade. He is author of the national guideline committee on Pulmonary Hypertension (Dtsch Med Wochenschr 2010; 135: S102-115). In interventional pulmonology he published new methods like perthoracical endopulmonary ultrasound to guide peripheral cancer biopsies (49th Congress of the German Society of Pulmology (DGP) 2008, Lübeck, P79) and reported for the first time surprising survival rates in NSCLC-patients following an interventional program that used controlled submaximal physical exercise as adjunct treatment to standard therapy (Medical Tribune 2010; 31/32: S16). On the 16th World Congress of Bronchology in Budapest he presented surprising preliminary data on survival of patients treated with ITC in combination with intravenous chemotherapy (16th WCB 2010, Budapest, A-0190).