Pau HW, Fichelmann J, Wild W; HNO-Universitatsklinik und Poliklinik Rostock. BACKGROUND: During middle ear surgery manipulations like burring, cooling with water, suction or even screwing cause changes of temperature which should be known to the surgeon. METHOD: An infrared thermovision device was introduced for registration. RESULTS: Thermography is an easy way for continuously recording thermic effects during surgery. If sufficient cooling is guaranteed, no temperatures high enough to cause tissue damage or functional defects could be observed. CONCLUSIONS: Adequate cooling provided, thermal injuries during ear surgery can be neglected. Thermography is an easy method for answering such questions, not only in ear surgery but also in other medical fields.