

## **American Society of Plastic & Reconstructive Surgeons Media Report** (information applies to all surgeries)

### **CIGARETTE SMOKING IMPAIRS HEALING**

There is a direct association between cigarette smoking and the ability to heal following a facelift, according to Dr. Thomas D. Rees, a plastic surgeon affiliated with the Manhattan Eye, Ear and Throat Hospital. Patients who smoke have twelve and a half times the chances of developing skin slough than patients who do not smoke, he indicated. Skin slough is the shedding of tissue which dies when a significant portion of blood supply fails to reach the skin and it results in delayed healing and more noticeable scar formation.

To confirm his long-held suspicion that smoking affects healing, Dr. Rees reviewed the records of 1186 consecutive patients who had undergone facelift surgery from 1975 through 1981. One-hundred twenty-one patients had evidence of skin slough. Dr. Rees was able to contact 91 of these patients, or 80%, admitted to smoking more than one pack of cigarettes a day. Eighteen patients, or 20%, denied that they smoked.

“Because nicotine constricts blood vessels, its impact on healing is compounded in surgery where the blood supply to facial skin is already temporarily reduced,” said Dr. Rees. This finding may be of some comfort to surgeons whose patients experience skin slough, because the condition can be blamed – to some extent, at least – on the patient’s smoking habits.

As a result of his findings, Dr. Rees now accepts for facelift surgery only those patients who agree to stop smoking ten days prior to surgery and abstain for three weeks after. “Because an appreciable part of every surgeon’s practice consists of smokers,” cautions Dr. Rees, “The implications of this study, in terms of patient selection and preoperative counseling seem considerable.”

“Heavy smokers can reasonably be denied elective aesthetic surgery unless they stop” he concludes. “Perhaps a suitable admonition to the smoking patient would be Warning...smoking can be hazardous to your facelift.”

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#### **TOBACCO SMOKING: IMPAIRMENT OF EXPERIMENTAL FLAP SURVIVAL**

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It is generally assumed that tobacco smoking impairs the survival of random flaps because of a decrease of blood supply to the skin. Previous clinical studies have indicated that this effect is mediated via the sympathetic nervous system, which produces marked vasoconstriction and thus a significant diminution of the blood supply to the skin. Experimental studies with nicotine have confirmed these observations; however, the authors overlooked the concurrent possible effects of other toxic factors, such as carbon monoxide, nitrous oxide, or hydrogen cyanide and the direct effect of smoke on lung tissue. The present study was designed to investigate the effect of tobacco smoking on the survival rate of experimental dorsal flaps in rats.