

## Correspondence

### Surgical treatment of axillary hyperhidrosis

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SIR, We read with great interest the recent article by Lawrence and Lonsdale Eccles<sup>1</sup> on selective sweat gland removal with minimal skin excision in the treatment of axillary hyperhidrosis, which contained fascinating and promising data. Based on our long-standing experience with surgical procedures for the treatment of excessive sweating we would like to add some further comments and information.

Lawrence and Lonsdale Eccles observed a notable reduction of axillary hyperhidrosis after surgery.<sup>1</sup> However, efficacy was only assessed by the patients themselves, who estimated the percentage reduction. Even though this evaluation seems convenient for clinical routine, we propose that efficacy of surgical procedures for axillary hyperhidrosis should be evaluated at least with one objective method (e.g. iodine starch test or gravimetry) if scientific studies are performed. This would facilitate the comparability of different surgical procedures.

In their discussion the authors mention the so-called novel surgical techniques for focal axillary hyperhidrosis, with special regard to curettage or liposuction. We agree with the authors' opinion that sufficient and stable removal of sweat glands is not possible by using standard liposuction cannulas. However, we have shown that with a specially designed, flat-tip rasping cannula an effective long-term reduction of axillary sweating is possible.<sup>2</sup> The counterpart to the described scissor snipping of sweat glands is obtained by pushing the axillary skin with adjacent sweat glands into the raSPS of the above-mentioned cannula, thus allowing an aggressive curettage (Fig. 1).

In their discussion Lawrence and Lonsdale Eccles underline the ongoing disagreement between supporters of open surgery and those who prefer minimally invasive strategies such as suction-curettage. Whereas some authors postulate the higher efficacy of open surgery, others point out that minimally invasive procedures lead to less scarring and complications.<sup>2,3</sup> Despite this discordance no side-control studies comparing open surgery and novel techniques (e.g. suction-curettage) are available although these data would be of great interest to physicians specialized in the treatment of focal axillary hyperhidrosis. Our hyperhidrosis study group plans to initiate a study in this regard.

We read the histopathological data with great interest. The fact that sweat glands were visible at the bottom of biopsy specimens with a minimum average depth of 3.5 mm may support the theory that suction-curettage may not be successful if performed in too superficial a plane.<sup>4</sup> Hence prior to curettage a slight superficial liposuction for removal of deep parts of sweat glands could enhance the efficacy of suction-curettage. Of further interest would be a histopathological study evaluating the pre- and postoperative density of sweat glands and to investigate a possible correlation between histological findings and clinical outcome.

To summarize, Lawrence and Lonsdale Eccles demonstrate that the so-called Shelley's procedure enables a permanent reduction of axillary hyperhidrosis. However, similar results are achievable with minimally invasive procedures such as suction-curettage.