## **Short Communication**

# Infra red coagulation for bleeding mucosal telangiectasia

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#### **Abstract**

The technique of infra red coagulation is well suited to the destruction of superficial blood vessels in the skin and/or mucosal surfaces. A method is described here for the destruction of resistant bleeding telangiectasia of the palate and lip in Osler-Weber-Rendu syndrome.

#### Introduction

Mucosal telangiectasia in Osler-Weber-Rendu syndrome can be difficult to treat. Cautery often fails because the wire loop or electrode sticks to the tissue and bleeding restarts when it is pulled away. We report the successful application of infra red coagulation to this problem on the palate and lip.

#### Case report

The patient was a 44-year-old woman with hereditary haemorrhagic telangiectasia. Her father and two of her brothers were also affected. Troublesome bleeding from her nose and palate began in 1980. By 1984, it had become so severe, and response to diathermy and cryosurgical probe so unsatisfactory, that a large part of her palatal mucosa was excised. Within two years new telangiectasia had appeared and bled spontaneously.

At this stage infra red coagulation was introduced using the IRK 151 (MBB—AT Munich) model of coagulator. 1.25 sec pulses with the 6 mm probe and sapphire contact tip were applied to three palatal lesions under local anaesthesia. The immediate effect was a white coagulum and this gradually separated over 7 to 10 days. The clinical results were excellent and a further session under general anaesthetic was arranged. Another four lesions on the palate and three labial telangiectasia were each given a single 1.25 sec pulse and all have disappeared. Lesions on the nasal septum were also coagulated but fresh bleeding started at the edge of the treatment zone and further attempts were abandoned.

### Discussion

The infra red coagulator has been used by proctologists to treat haemorrhoids, by gynaecologists to coagulate cervical erosions, and by surgeons to staunch parenchymal bleeding from the liver and spleen (Guthy *et al.*, 1984). In dermatology, there are wider applications which include dealing with port wine stains, venous lakes (Colver and Hunter, 1987) and the lesions of Kaposi's sarcoma (Aldridge *et al.*, 1989). Extending this to the mucosal vascular lesions of hereditary haemorrhagic telangiectasia is a natural progression.

The coagulator is a small hand held unit with a tungsten halogen bulb as the energy source (Fig. 1). Visible and infra red light is conducted down a quartz guide and exits through a sapphire cap which can be placed directly on to the vascular lesion. Pulses of 1.0–1.25 sec are adequate in most cases to destroy superficial lesions. The technique has the singular advantage that one can compress the lesion and empty it of blood before coagulation. Because the injury is repeatable and predictable (Colver et al., 1986) precise treatment can be given on the first occasion. Finally the sapphire cap does not adhere to coagulated tissue and rebleeding is unlikely when the cap is removed.

On our patient's lip and palate, the treatment was an outstanding success but the nasal mucosa was so friable that rebleeding occurred at the edge of each treatment site. A different design of light guide, which allowed more direct pressure, might have given better results here. The infra red coagulator is a versatile instrument and we believe that it has a place in the management of the mucosal lesions of Osler-Weber-Rendu syndrome.

The infra red coagulator is manufactured by MBB-AT of Munich and is distributed by Chilworth Medicals Ltd of 31 Dorking Road, Chilworth, Guildford, Surrey.

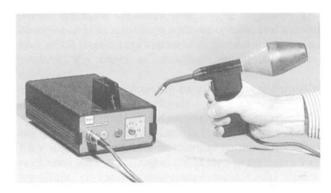


Fig. 1

The infra red coagulator. The box contains a transformer and electronic timer. The handpiece comprises a halogen bulb (covered) quartz light guide and sapphire contact cap.

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SHORT COMMUNICATION 993

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