

new treatment for birthmarks

A newly-developed instrument holds out new hope for persons born with the port wine stain birthmark. It is being used in a program of experimental surgery at the Hospital for Sick Children in Toronto and the Toronto General Hospital

One of the minor medical mysteries is the cause of the port wine stain birthmark. Doctors know that reddish-purple discolorations are caused by an accumulation of blood vessels in the superficial skin of the face and neck. They know that these excess blood vessels serve no useful purpose, but they don't know what causes them to accumulate nor do they know how to prevent them.

The port wine stain birthmark can range in size from the equivalent of a 25 cent piece to a vivid blotch covering the entire face. There is no completely satisfactory method of eradication since there is rarely any abnormality of skin contour or texture. Plastic surgeons have found that any treatment other than by changing color adds both a contour and texture variation, thus

creating a secondary problem greater than the primary one.

There are two methods of changing color. Proprietary cosmetics have long been used to provide a temporary color match with normal skin surrounding the stain area. A more permanent solution has been attempted using color matching through intra-dermal injection of pigmentation mixtures. In the latter procedure, an instrument designed by engineers of the National Research Council of Canada is now being used in a program of experimental surgery, by a Toronto plastic surgeon, that holds out new hope for those unfortunate enough to be born with this disfigurement.

This procedure, similar to tattooing, was pioneered in the 1940's by a New York surgeon, Dr. Herbert Conway. It involves injection of pigments — primarily whites and greens — to combine with the reds of the stain to form a color tone that, ideally, would blend perfectly into normal skin surrounding the stain area.

Unfortunately, the procedure does not produce satisfactory resolution of three main problems: how to insert an adequate volume of pigment at the time of the operation; how to prevent leaching away of the pigment particles; and how to obtain a color match of the pigment to the patient.



S. H. G. Connock (left) and Dr. H. G. Thomson examine components of the new instrument.

M. S. H. G. Connock (à gauche) et M. H. G. Thomson examinent les différentes parties du nouvel instrument.