

Letter to the Editor

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Recently we were able to show, in a double-blind cross-over study, that the clinical effect of inhaled salbutamol (Ventoline®) powder (0.2 mg/dosis) equalled that of salbutamol by spray (0.1 mg/dosis) in children with moderately severe bronchial asthma (1). The device for the powder inhalation was technically rather com-

plicated as well as fragile and most of the children preferred to continue the use of a spray rather than the powder. However, in the youngest children it seemed to be somewhat easier to inhale powder than spray.

A new and simplified Rotahaler® has now been developed for the inhalation of powder. The device is moulded entirely in plastics and consists (Fig. 1) of a mouth piece (marked 6) and an outer barrel (= 9). The mouth piece includes a filter (= 7), an internal bar (for the separation of the two halves of the capsule, (= 3) and an inner barrel (= 8). Capsules are inserted into a raised square hole (= 2). The outer barrel is rotated around the inner barrel, starting with the small boss (= 5) at either end of the cutaway portion (= 4), thereby dividing the capsule. When the patient inhales, air passes the crescent-shaped slot (= 1) and makes the freed half of the capsule spin, dispersing the powder. Most often one inhalation is sufficient. The resistance to air flow is low (6 cm water gauge) in this new Rotahaler in comparison with other inhalors, e.g. the Intal Spinhaler® (13 cm). We have performed an open clinical assessment of salbutamol powder inhaled by the new Rotahaler over 1 month in 17 of the children (now 8-19 years of age) taking part in our previous study. The attitudes towards the new Rotahaler were collected by a questionnaire.

Even if 12 of the 17 patients found it at least somewhat easier to handle the spray as compared to the Rotahaler, as many as 11 of them found it easier to inhale powder in comparison with spray. All found the new Rotahaler superior to the previous prototype. Seven of the patients preferred to choose powder inhalation

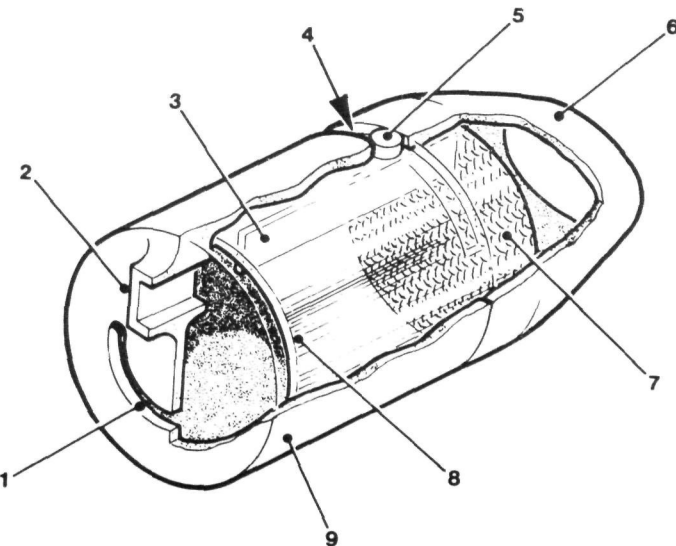
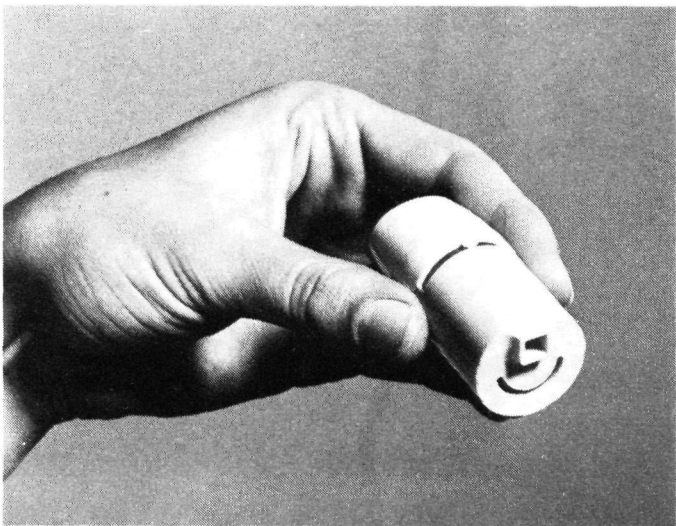


Fig. 1. The new Rotahaler®.

by the new Rotahaler for the future, four were undecided and six preferred the use of a spray.

This study reinforces our impression that the inhalation of salbutamol in powder form is an attractive alternative when using a spray is difficult or unwanted – especially with the new Rotahaler for inhalation of the powder.

N.-I. Max Kjellman
Björn Wirenstrand

REFERENCE

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Address:

N.-I. Max Kjellman
Department of Pediatrics
University Hospital
S-581 85 Linköping
Sweden

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