

A blue patient with patent blue

A 68-year-old man underwent colonoscopy because of a 3-cm semicircular sessile polyp in the transverse colon, close to the left flexure. The aim was to mark the polyp for the operative resection planned for the next day. To mark the polyp, 6 ml patent blue was used (Patentblau V; Guerbet GmbH, Sulzbach, Germany). As a first step, depots of saline solution were injected at the edges of the polyp. After that, the patent blue solution was injected. Fifteen minutes after the end of the colonoscopy, the nurse observed that the patient's lips were blue, without any sign of dyspnea. For safety reasons he was not removed to the ward for another 3 hours. In these 3 hours the color of his skin changed to dark blue all over his body (▶ Fig. 1). By 48 hours after the injection, the dark blue color had vanished and the skin was pink again. During the whole time the patient was very well, without any signs of dyspnea or allergic reaction.

Patent blue is a substance which is increasingly being used to mark the sentinel node and for lymphatic mapping in carcinoma of the colon and rectum [1,2]. It is also used as a food colorant (e.g., blue curacao, jelly beans). There have been a few cases of localized adverse events occurring during mapping for breast cancer and melanoma, but no discoloring of the whole body and none at all when patent blue was being used in the colon [3]. Two reasons are suspected as the cause of the blue skin color: discoloration due to lymphatic spread from the injection site, and methemoglobinemia [4]. Anaphylactic reactions have been described as a side effect, and intracutaneous tests with the dye should be done in advance of any endoscopic procedure in which the dye is used [5].

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Fig. 1 Blue skin color over a patient's whole body 3.25 hours after injection of patent blue, performed to mark a colonic polyp intended for resection the following day

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