Methylene Blue halves the long-term recurrence rate in acute pilonidal sinus disease.

OBJECTIVE: To study the potential benefits of intraoperative methylene blue (MB) use in pilonidal sinus surgery, the correlation between long-term recurrence rate and intraoperative MB use in pilonidal sinus surgery was investigated.

BACKGROUND: Explicit investigations of MB effects in sinus surgery are scarce and inconclusive; an effect on long-term recurrence rate has never been systematically investigated.

MATERIALS AND METHODS: A random selection of 247 patients out of 1,960 patients with primary sinus surgery was drawn, and the patients were subjected to a telephone interview according to a specific questionnaire. The interview covered a recurrence follow-up time of 14.9 years after surgery (mean, standard deviation=3.8 years, range 8.6-25.4 years).

RESULTS: Recurrence was less likely to occur when MB was used intraoperatively (32 of 197, [16% actuarial 20-year recurrence rate, Kaplan-Meier estimate] recurrences with MB vs 15 of 50, 30% [actuarial 20-year recurrence rate, Kaplan-Meier estimate] recurrences without MB; p=0.018; log-rank test). This effect was especially pronounced in acute abscess-forming disease (8 of 46, 17% [actuarial 20-year recurrence rate, Kaplan-Meier estimate] recurrences with MB; 11 of 33, 33% [actuarial 20-year recurrence rate, Kaplan-Meier estimate] recurrences without MB; p=0.078; log-rank test).
compared to chronic disease (24 of 151, 16% [actuarial 20-year recurrence rate, Kaplan-Meier estimate]) recurrences with MB; 4 of 17, 24% [actuarial 20-year recurrence rate, Kaplan-Meier estimate] recurrences without MB; p=0.35; log-rank test). CONCLUSIONS: MB application halves the long-term risk of recurrence for pilonidal sinus patients. This significant reduction in recurrence rate can be achieved by a single careful injection of non toxic inexpensive dye into the sinus at the start of the operation. MB application should therefore be considered as an integral part of pilonidal sinus surgery.