Title:
Scientific letter Efficacy of daily abdominal self-massage for the prevention of recurrent common bile duct stones after endoscopic biliary sphincterotomy.

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DOI: 10.17235/reed.2021.7794/2021
Link: PubMed (Epub ahead of print)

Please cite this article as:

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Efficacy of daily abdominal self-massage for the prevention of recurrent common bile duct stones after endoscopic biliary sphincterotomy.

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Keywords: Abdominal massage. Recurrent common bile duct stone. Cholescintigrapy. Endoscopic biliary sphincterotomy.
Authors’ contributions: N.U. conceived and designed the study. H.Y., and T.N. collected the data. All authors read and approved the final manuscript.

Dear Editor,

Recurrent common bile duct stones (CBDS) can occur after endoscopic biliary sphincterotomy (EST) [1]. Bile flow through the Papilla of Vater could be improved by means of abdominal massage [2]. We report the results of self-abdominal massage in four patients who had previously undergone cholecystectomy and experienced multiple CBDS recurrences after EST. Patients massage daily their right hypochondrium for 10 minutes.

Patient 1 suffered nine recurrent CBDS episodes during 10 years after EST. The patient began abdominal self-massage in 1996. He had only one CBDS recurrence until his death in 2005, due to a non-related biliary cause. He underwent cholescintigraphy to evaluate the influence of massage on bile excretion. As it is shown in Figure 1 A and B, bile flow into the duodenum was increased by self-massage.

Patient 2 experienced 22 CBDS recurrences during 11 years after EST. Abdominal self-massage was started in 2000. No further recurrence was observed. The patient was lost for follow-up in 2011.
Patient 3. CBDS recurred 9 times during 14 years after EST. Abdominal self-massage was started in 2013. Since then, no further CBDS recurrence have been observed. The patient is currently on follow-up.

Patient 4 had a body mass index of 29.9 (obese). Abdominal self-massage was not effective.

We have reported three patients in whom abdominal self-massage was effective to prevent recurrent CBDS. Obviously, further research is necessary to confirm our findings. Delayed bile excretion has been presumed to cause recurrent CBDS [3]. Therefore, bile cholescintigraphy could be useful to study the influence of self-massage in preventing CBDS recurrence.

REFERENCES


Fig. 1A. Results of cholescintigraphy — time versus radioactivity curve under non-massage and massage conditions.

The region of interest was plotted in the duodenum close to the Papilla of Vater. The red line illustrates the radioactivity curve under non-massage conditions, and the blue line shows the radioactivity curve under massage conditions. The flow of bile into the duodenum is seen to be increased by abdominal massage, as indicated by large spikes seen on the difference of the pitch curve.
Fig. 1B. Cumulative counts of 99mTc-pyridoxyl-5-methyl-tryptophan every 5 min for 90 min in the duodenum.

The bar graph shows cumulative counts of 99mTc-pyridoxyl-5-methyl-tryptophan (99mTc-PMT) every 5 min for 90 min in the duodenum close to the Papilla of Vater under non-massage and massage conditions. The red bars relate to cumulative counts in non-massage conditions, while the blue bars show cumulative counts under massage conditions. The cumulative counts of 99mTc-PMT under massage conditions are higher than those under non-massage conditions.