SPONTANEOUS PASSAGE OF GALLSTONES AFTER INGESTION OF OLIVE OIL: A CASE REPORT

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SYNOPSIS

A case of spontaneous passage of multiple cholesterol gallstones after self-treatment with olive oil and lemon juice is reported. Although this form of treatment has been claimed to be safe and effective for cholelithiasis, especially by some nonmedical personnel, such treatment is not to be advised because of the possibility of side effects such as acute pancreatitis. Further study on the efficacy and safety of this mode of treatment is needed before it may be considered as an alternative to present methods for treatment of gallstones.

INTRODUCTION

It is estimated that gallstones are present in approximately 15% of adult females and 6% of adult males, and its prevalence increases with age (1). Although it is generally agreed that there is a need for surgical treatment in patients with cholelithiasis who develop complications, the treatment of 'silent stones' is controversial. Gracie and Ransohoff (2) state that routine prophylactic operation for silent stones is not advisable nor desirable, at least among white American men. Thus, non-surgical treatment has a role in the management of the patient with gallstones.

At present, the application of drug treatment of cholelithiasis is relatively expensive and limited, usually for those unfit for surgery, with small radiolucent stones, and without history of complications (3).

Other methods of treatment of gall stones have also been described. Kurtz and Classen (4) have reported that treatment for common bile duct stones may include endoscopic removal and lithotripsy, and gallstone dissolution by irrigation procedures. In animal experiments, extracoporeal shock waves have been used to destroy the stones (5).

The result of another form of treatment for gallstones is reported.

CASE REPORT

The patient, a 32-year old Indian male insurance salesman, had a 3 year history of epigastric pain and colicky right hypochondrial pain whenever he took fatty meals. Physical examination was unremarkable and a barium meal study showed no evidence of gastro-oesophageal reflux or hiatus hernia, and no evidence of gastric or duodenal ulcer. However, the plain abdominal X-ray revealed multiple radio-opaque gallstones.

The patient was advised surgery for cholelithiasis, but was not enthusiastic about the idea. He returned the following day with news that he had attempted a self-cure for the gallstones using olive oil and lemon juice (6). According to him, after fasting from noon, he took one pint of olive oil and lemon juice at 7 p.m. He then went to sleep on his right side. At about 2-3 a.m. the following morning, he felt a churning sensation in the abdomen. At 5 a.m. he passed out oily stools which he collected in a strainer. Upon washing the stools, he found numerous smooth stones. (Fig. 1-4)

Analysis of two of the stones showed them to be greenish, smooth and soft, measuring $15 \times 12 \times 5$ mm and $10 \times 6 \times 3$ nm respectively. The stones were found to consist entirely of cholesterol. A repeat plain abdominal x-ray still showed the presence of radioopaque gallstones. Therefore, the patient was advised surgery, and subsequently had an operation to remove the gallstones a few months later in Sri Lanka.

DISCUSSION

Even without any treatment, spontaneous passage of gallstones may occur. Bergdahl and Holmund (7) noted that after cholecystectomy, 24 out of 64 patients with retained bile duct stones had spontaneous passage of the stones. Although these stones are generally small, larger (10 mm diameter) stones have also been reported to be spontaneously passed out (8).

Herbal Treatment

A form of treatment which has been used by some people is the herbal cure for gallstones. Airola (9) described an 'oil cure' for removal of gallstones, using raw natural unrefined vegetable oils of olive, sunflower or walnut, while Roberts (6) prescribed a specific dosage of 1 pint of olive oil and the juice of 8 to 9 lemons. The patient is required to take 4 tablesspoonfuls of olive oil followed by 1 tablespoonful of lemon juice at 15 minute intervals. This is to be started in the evening after fasting from lunch time, and the gallstones are expected to be passed out within 24 to 48 hours.

This form of treatment has been largely promoted by non physicians, but a doctor from Canada (10), has reported that 95% of cases he saw this treatment used on passed out gallstones. However, this treatment is not without its complications. A potential side effect of this form of treatment is that the migrating gallstones can transiently block the ampulla of Vater and cause acute pancreatitis (11).

Although excellent success rates have been claimed, (6, 9, 10) in this patient, not all the gallstones were passed out with this treatment, and surgery had still to be resorted to for the complete removal of the gallstones. Moreover, the gallstones passed out by the patient were cholesterol stones which would probably be radiolucent, and thus were most likely additional stones which were not detected by the initial plain abdominal x-ray film.

Furthermore, although the advocates of 'oil cure' for cholelithiasis claim that there are minimal side effects (6), it should however be remembered that a possible



Figure 1: Oily stools of patient collected in a strainer (10 hours after taking olive oil and lemon juice).



Figure 2: After washing the stools, multiple soft smooth greenish cholesterol stones, some measuring up to 15 mm, were seen.

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Figure 3: Close up view of the stones.



Figure 4: Close up view of the stones.

side effect is that of acute pancreatitis (11), and therefore this treatment should not be indiscriminately encouraged.

However, this treatment is non-invasive, and numerous stones measuring up to 15 mm could be passed out (as seen in this patient). As the oil cure treatment could perhaps prove to be a relatively inexpensive alternative to conventional drug treatment in some instances, it is suggested that well controlled and well supervised studies could be considered to explore the safety and efficacy of this mode of treatment for gallstones.

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