



PostOperative Chewing Gum

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- Gum chewing will kickstart bowel function
- after abdominal surgery
- and possibly reduce hospital stay as well

- **Ileus** is the absence of intestinal peristalsis without mechanical obstruction;
- **postoperative ileus** refers to the time after surgery before coordinated electromotor bowel function resumes.

- The small bowel normally resumes activity several hours after surgery,
- The stomach 24 to 48 hours after surgery, and
- The colon 3 to 5 days after surgery.
- When postoperative ileus persists longer than this, it can be considered pathologic and is sometimes called **paralytic ileus**

- Recovery of gastrointestinal function after gastrointestinal surgery is clinically important because paralytic ileus may contribute pain, nausea, vomiting, and pulmonary dysfunction.
- Food intake has been reported to stimulate bowel motility. Gum-chewing is postulated to work because it mimics food intake, i.e. sham feeding

Patients

- Pregnant women delivered by elective caesarean section (CS) under general anaesthesia.
- Women undergone gynecologic surgery under general anaesthesia

Dose

- patients chew sugarless gum **for**
 - a period ranging from five to 45 (30) minutes three times a day after surgery
 - **Or for** 15 minutes starting two hours after end of operation
- every** two hours thereafter
- (during waking time, stopped during overnight sleep)
- **until** the hearing normal intestinal sounds or the passage of flatus or the passage of bowel movement

Evaluation

- All patients were evaluated hourly after surgery
- by the same resident physicians,
- who precisely recorded times of **first bowel sounds**,
- **first flatus** and
- **first defecation**



Fluid And Diet

- They had **oral intake** of clear fluids allowed after hearing of normal intestinal sounds or the passage of flatus
- They had **regular diet** with the passage of flatus or the passage of bowel movement .

For analgesia

- Two intramuscular doses of 75 mg diclofenac sodium , a nonsteroidal anti-inflammatory medication, will be routinely given at 2 and 12 hours post-operatively.
- The need for additional use of narcotics (pethidine, 1 mg/kg) will be recorded.

- **Time to** first hearing of normal intestinal sounds (10.9 ± 2.7 versus control 15.6 ± 3.7 hours),
- **Time to** first passage of flatus (17.9 ± 4.6 versus control 24.4 ± 7.1 hours),
- **Time to** first defecation (21.1 ± 4.7 versus control 30 ± 8.2 hours) , and
- **Time to** first tolerated oral feeding
- **Time to** discharge from the hospital (40.8 ± 10.6 versus control 50.5 ± 8.9 hours (The potential cost savings from the reduction of even one postoperative day compared with the cost of several sticks of chewing gum are huge)

How ?

- Gum chewing acts as "sham feeding"
- To stimulates gastric, duodenal and rectal motility
- To produce saliva and pancreatic secretions and
- To trigger gastrointestinal hormone release and
- To trigger cephalic-vagal stimula
- While avoiding the complications observed with early oral feeding

Conclusion

- Gum chewing after abdominal operations is
- Safe,
- Well tolerated, and
- Associated with rapid resumption of intestinal motility and
- Shorter hospital stay;
- With potential impact on reducing the overall healthcare costs in case of routine implementation