Supplementary data

Preoperative and postoperative pain control program

The goal of this program is to help patients with appendectomy recover quickly by minimizing pre- and postoperative stress and maintaining body homeostasis.

- -Pain control before surgery
- -Early food intake after surgery
- -Early ambulation after surgery
- -Effective pain control
- -Fast discharge after early recovery from surgery

Pain control

Inadequate pain control delays the patient's postoperative recovery. Effective pain control before and after surgery usually leads patients to recover.

Successful pain control can minimize the use of narcotic analgesics that can result in limited bowel movements.

Activity

The movement of the body creates strength, improves blood circulation, promotes bowel movement. Moreover, it leads to faster recovery by reducing complications after surgery.

Food intake

In the past, the patient was not allowed to eat food or drink water until farting after surgery.

However, if there is no particular intraoperative problem, early food intake is recommended nowadays, since early food intake may assist to control the condition or complications of the patient and promote bowel movements.

Water and food stimulate bowel movements, which quickens farting. If there are no nausea and vomiting symptoms due to general anesthesia-related complications, the patient is allowed to drink water one hour after surgery and then start soluble diet.

The patient may be discharged from the hospital if the following conditions are satisfied.**

<Discharge criteria>

- -No specific postoperative complications
- -Ability to eat soluable diet without complications
- -Availability of ambulation without the help of guardian
- -Availability of pain control with oral medication

| | Before operation | After operation | POD 1 | POD 2 |
|--------------|--|---|---|------------------------------|
| Diet | NPO | SOW after 4 hours and soluble diet after SOW | Rigid diet | Rigid diet |
| Pain control | Operation permission, pain education, pain control (intravenous) | Pain control (intravenous), additional pain control intravenously if NRS is higher than 5 | Pain control (PO medication), additional pain control intravenously if NRS is higher than 5 | Pain control (PO medication) |
| Activity | Bedrest | Semi-Fowler position right after operation, ward ambulation after 4 hours, encourage deep breathing and cough | Ward ambulation (more than 2,000 steps) | Daily activity |
| Drain | | Keep drainage | Remove drainage after checking amount and color | No drainage |

POD, postoperative day; NPO, nil per os; SOW, sips of water; NRS, numeric rating scale; PO, per os.