

## **Suction/Open Rectal Biopsy** **抽吸／開放式直腸活組織檢查**

### **Suction Rectal Biopsy**

#### **Introduction**

Suction rectal biopsy is a bedside procedure commonly performed for children with constipation that is refractory to conservative management. The aim of this procedure is to get small pieces of tissue from the rectum to look for presence of ganglion cells (nerve cells), which is essential for normal bowel function. The absence of ganglion cells is seen in Hirschsprung's disease, which causes constipation in patients.

This is a relatively safe procedure and does not require general anesthesia; the pain associated with the procedure is minimal and most children tolerated the discomfort well.

#### **The procedure**

1. Patient's identity is double checked with informed consent obtained
2. Rectal washout is performed before the procedure to clear up the bowel
3. Patient is either placed on his side or on the back
4. A pen like instrument is inserted into the rectum with small piece of tissue removed
5. The procedure is repeated at several levels to obtain multiple specimens
6. The specimens are then sent to laboratory for further investigation
7. After the procedure the rectum is checked again to make sure there is no active bleeding

### **Open rectal biopsy**

#### **Introduction**

The principle and indication for open rectal biopsy are similar to those of suction rectal biopsy. This procedure is usually reserved for elder children where suction rectal biopsy is unlikely to result in an adequate specimen. General anesthesia is required.

#### **The procedure**

1. Patient's identity is double checked and put under general anesthesia
2. Patient is placed on his back with legs spread apart

3. Small piece of rectal tissue is removed
4. The specimen is then sent to laboratory for further investigation
5. Absorbable suture is applied to the rectal wound
6. After the procedure the rectum is checked again to make sure there is no active bleeding

## Risk

### Common complication related to the procedure:

1. Per-rectal bleeding
2. Infection
3. Inadequate tissue obtained with need to repeat the procedure

### Severe but rare complication:

1. Rectal perforation +/- emergency operation

## Preparation before the procedure

Before the procedure parents will be given a fasting time according to the schedule. Otherwise child can remain on usual diet and no special medication is required.

## Care after the procedure

1. The child can return to normal feeding and care
2. It is normal to have a small amount of blood in stool after the procedure. This is usually self-limiting
3. Do not perform per-rectal examination, per-rectal drug administration or rectal washout in the first 24 hours after the procedure
4. If the child is well after the procedure, home leave can be allowed
5. If the bleeding continues or become very severe, bring the child back to hospital for doctor's assessment
6. The formal pathology report usually takes 5 to 7 days, and the doctor will further discuss about the following plan when the result is available

### **Follow up**

Clinical condition and pathology result of the biopsy will be reviewed at next follow-up. Further treatment plan including medication or operation will be explained in clinic if necessary.

### **Remarks**

This is general information only and the list of complications is not exhaustive. Other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For further information, please contact your doctor.