General Data

• ID no.: 21967416
• Name: 卜〇騰
• Gender: male
• Age: 15 yrs
• Admission date: 2012/ 11/ 5
Chief Complaint

• Bloody stool for 2 months
Present Illness

- Bloody and mucus stool for 2 months.
- Sigmoidfibroscopy revealed ulcers with hemorrhagic spots.
- No abdominal pain, vomiting, or diarrhea.
- No weight loss.
Physical Examination

• Figure: Height: 178cm (>95th percentile) weight: 62kg (75th~90th percentile)
• General appearance: fair
• Vital signs: BT: 36.8°C; HR: 88/ min; RR: 20/ min BP: 114/ 76 mmHg
• HEENT: grossly normal, conjuctiva: pale
• Neck: supple, no lymphadenopathy
• Chest: symmetric bilateral breathing sound clear
• Heart: regular heart beat, no murmur
• Abdomen: soft, bowel sound normoactive, no palpable mass, no hepatosplenomegaly, no rebounding pain or muscle guarding
• Extremities: warm, freely movable
Lab Data (initial)

- WBC = 5120, DC: N/L/M = 47.1% / 40.0% / 7.8%
- RBC = 5.50 x 10^6 / μl, Hb = 14.4, Hct: 40.6%, MCV = 73.8 fL
- Platelet = 290K
- LDH = 148 IU/L, CRP = 0.06 mg/dL, ESR = 1 mm/1hr
Hospital Course

• Colonofibroscope was arranged on 3\textsuperscript{rd} day after colon preparation
Colonofiberscope Findings

• The colon fiberscope was inserted in till 100 cm from anal verge.
• A big Yamada type C colonic polyp from anal verge 55cm area, size about $4 \times 6\text{cm}$ in diameter.
• Several small (0.3~0.5cm) Yamada type A polyps over the terminal ileum.
Interventions

- Endoloop was performed around the base of the polyp
- Removed the polyp by electrical ligation
- Do 4 hemoclips for the big stump
- Biopsy over the polyps
Hospital Course

• The patient was discharged 3 days after the procedure.
Pathology

- Small ileal polyp:
  - lymphoid polyp with minimal villous abnormality
  - Patchy reactive surface epithelial hyperplasia
  - Indistinct glandular dysplasia
- Big colonic polyp
  - Sporadic juvenile polyp with evident surface erosions
  - Significant lamina propria edema and stromal fibroplasia
  - Scattered retention microcysts formation
  - Indistinct glandular dysplasia.
- No malignancy was seen in all sections.
Juvenile Colonic Polyps
Major causes of lower gastrointestinal bleeding in children by age group

- Swallowed maternal blood
- Necrotizing enterocolitis
- Malrotation with volvulus
- Coagulopathy
- Hirschsprung’s
- Allergic colitis
- Infectious colitis
- Anorectal fissure
- Lymphonodular hyperplasia
- Intestinal duplication
- Intussusception
- Meckel’s diverticulum
- Hemolytic uremic syndrome
- Henoch-Schoenlein purpura
- Juvenile polyp
- Inflammatory bowel disease

<table>
<thead>
<tr>
<th>Condition</th>
<th>Neonate (1 mo-2 y)</th>
<th>Infant (2-5 y)</th>
<th>Preschool (&gt;5 y)</th>
<th>School age (&gt;5 y)</th>
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Introduction

• Also known as retention/ inflammatory polyps
• The most common childhood bowel tumors
• 1–3% of people <21 year. Rarely appear before 1 yr. Most present between 2 ~10 yr. Uncommon beyond 15 yr of age.
• The polyps are evenly distributed through the colon.
• Erythematous, friable and pedunculated
• Size: a few mm ~ 3cm
Histology

- Hamartomatous proliferation of mucus-filled glandular and stromal elements
- Marked vascularity
- Infiltration with lymphocytes, eosinophils, PMN and plasma cells.
- Mucus-filled cystic glands
- Covered by a fragile, single layer of epithelium
- The typical juvenile polyp with no adenomatous changes has **no** potential for malignancy.
Clinical Manifestations

- **Bright red, painless** rectal bleeding during or immediately after defecation.
- Bleeding often stops spontaneously.
- Iron-deficiency anemia
- Prolapsed polyps:
  - Dark, beefy red, pedunculated masses
  - Perianal pruritus and mucous discharge
- Spontaneous polyp infarction and self-amputation
- Lower abdominal pain and cramps (uncommon)
- Diarrhea/obstruction (uncommon)
Differential Diagnosis

- Other forms of intestinal polyposis
- Meckel diverticulum
- Anal fissure
- Inflammatory bowel disease
- Intestinal infections
- Henoch-Schönlein purpura (HSP)
- Coagulation disorders
Diagnosis and treatment

- Usually made by colonoscopy
- Smooth, pedunculated lesions
- Treatment: removal of the polyp at colonoscopy by snare cautery/ transabdominal polypectomy (rare)
- Histologic confirmation of the diagnosis
Thank you for your attention.