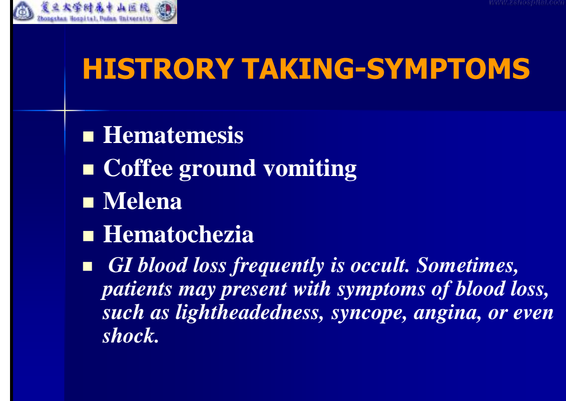
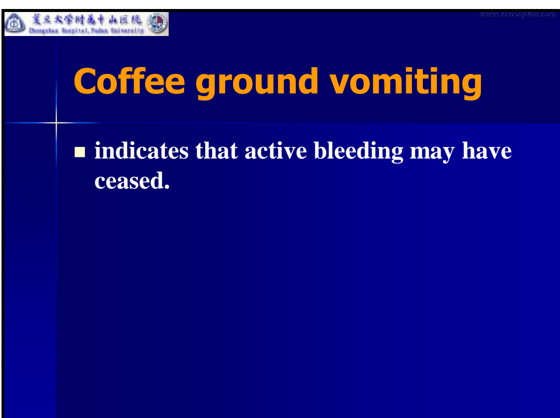
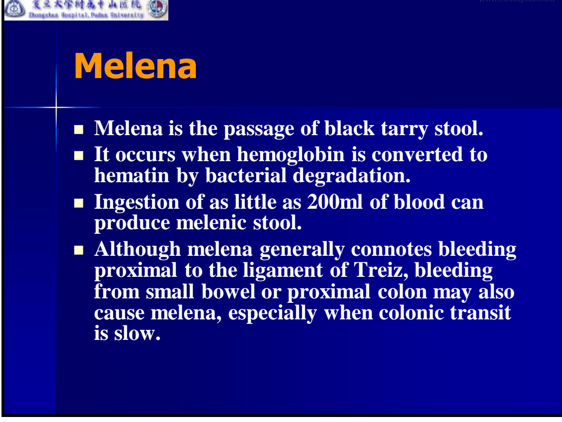
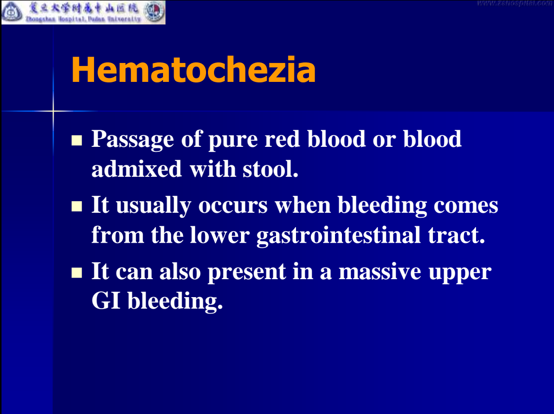


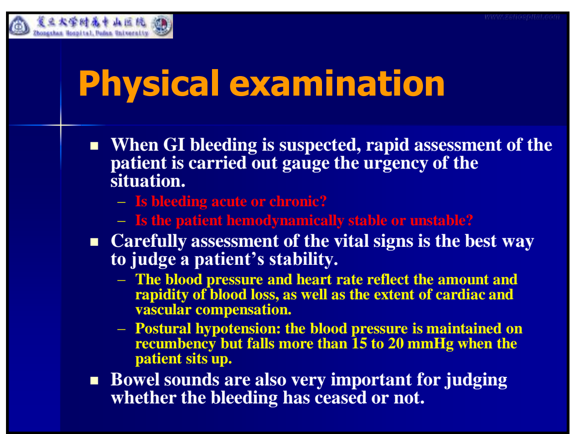
Hematemesis

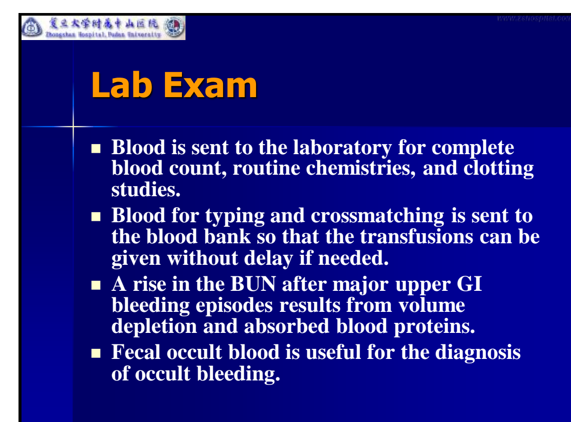
- Hematemesis is vomiting of fresh blood.
- Hematemesis indicates that bleeding originates from a site proximal to the ligament of Treiz.
- A history of fresh hematemesis usually implies a significant bleed

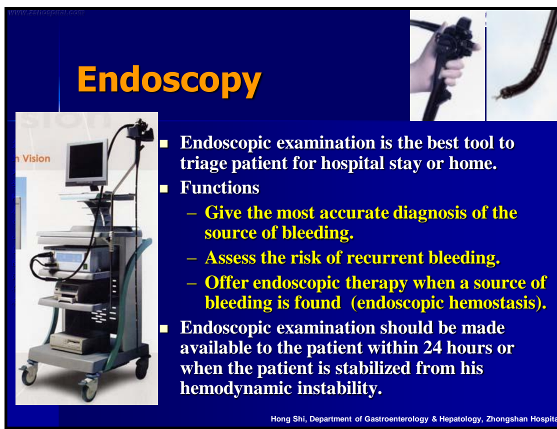







Physical examination
When GI bleeding is suspected, rapid assessment of the patient is carried out gauge the urgency of the situation.
– Is bleeding acute or chronic?
– Is the patient hemodynamically stable or unstable?
Carefully assessment of the vital signs is the best way to judge a patient's stability.
– The blood pressure and heart rate reflect the amount and rapidity of blood loss, as well as the extent of cardiac and vascular compensation.
– Postural hypotension: the blood pressure is maintained on recumbency but falls more than 15 to 20 mmHg when the patient sits up.
Bowel sounds are also very important for judging whether the bleeding has ceased or not.


Lab Exam
Blood is sent to the laboratory for complete blood count, routine chemistries, and clotting studies.
Blood for typing and crossmatching is sent to the blood bank so that the transfusions can be given without delay if needed.
A rise in the BUN after major upper GI bleeding episodes results from volume depletion and absorbed blood proteins.
Fecal occult blood is useful for the diagnosis of occult bleeding.


Endoscopy
Endoscopic examination is the best tool to triage patient for hospital stay or home.
Functions
– Give the most accurate diagnosis of the source of bleeding.
– Assess the risk of recurrent bleeding.
– Offer endoscopic therapy when a source of bleeding is found (endoscopic hemostasis).
Endoscopic examination should be made available to the patient within 24 hours or when the patient is stabilized from his hemodynamic instability.
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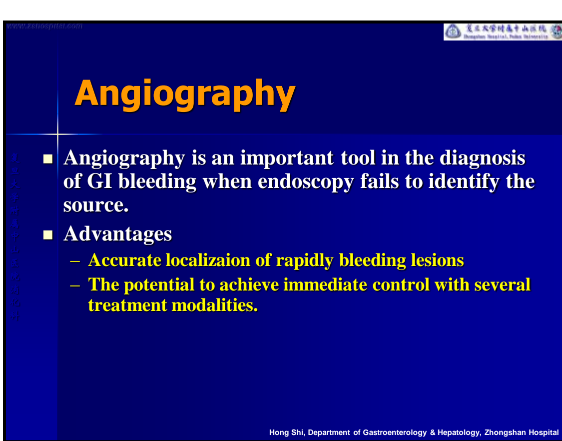
Angiography
Angiography is an important tool in the diagnosis of GI bleeding when endoscopy fails to identify the source.
Advantages
– Accurate localizaion of rapidly bleeding lesions
– The potential to achieve immediate control with several treatment modalities.
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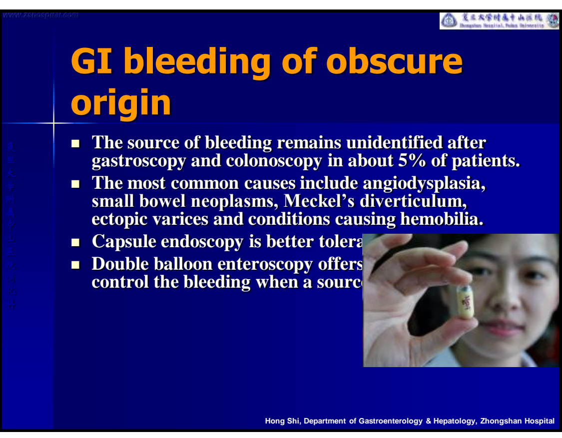
GI bleeding of obscure origin
The source of bleeding remains unidentified after gastroscopy and colonoscopy in about 5% of patients.
The most common causes include angiodysplasia, small bowel neoplasms, Meckel's diverticulum, ectopic varices and conditions causing hemobilia.
Capsule endoscopy is better tolera
Double balloon enteroscopy offers control the bleeding when a sourc
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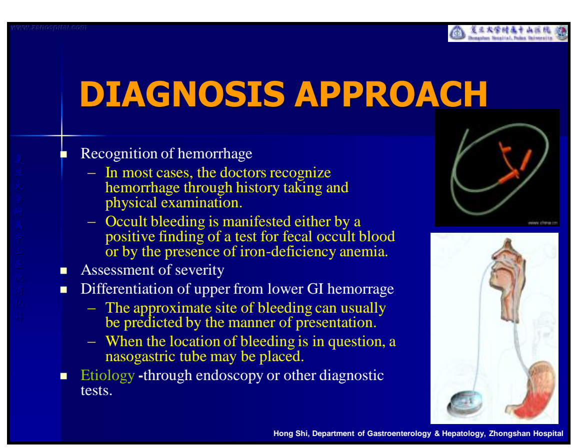
DIAGNOSIS APPROACH
Recognition of hemorrhage
– In most cases, the doctors recognize hemorrhage through history taking and physical examination.
– Occult bleeding is manifested either by a positive finding of a test for fecal occult blood or by the presence of iron-deficiency anemia.
Assessment of severity
Differentiation of upper from lower GI hemorrage
– The approximate site of bleeding can usually be predicted by the manner of presentation.
– When the location of bleeding is in question, a nasogastric tube may be placed.
Etiology -through endoscopy or other diagnostic tests.
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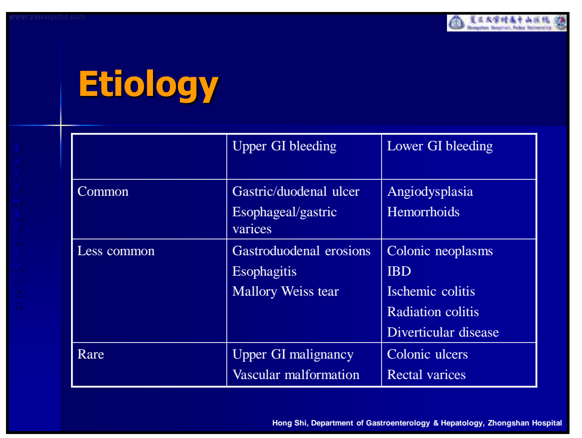

	Upper GI bleeding	Lower GI bleeding
Common	Gastric/duodenal ulcer Esophageal/gastric varices	Angiodysplasia Hemorrhoids
Less common	Gastroduodenal erosions Esophagitis Mallory Weiss tear	Colonic neoplasms IBD Ischemic colitis Radiation colitis Diverticular disease
Rare	Upper GI malignancy Vascular malformation	Colonic ulcers Rectal varices

High risk patients

- Significant GI bleeding
  - Syncope
  - Haematemesis
  - Systolic blood pressure below 100mmHg
  - Postural hypotension
  - 4 units of blood have to be transfused in 12 hours to maintain blood pressure
- Patients over 60 years old and with multiple underlying diseases
- Admitted for other medical problems and developed GI bleeding during hospitalization

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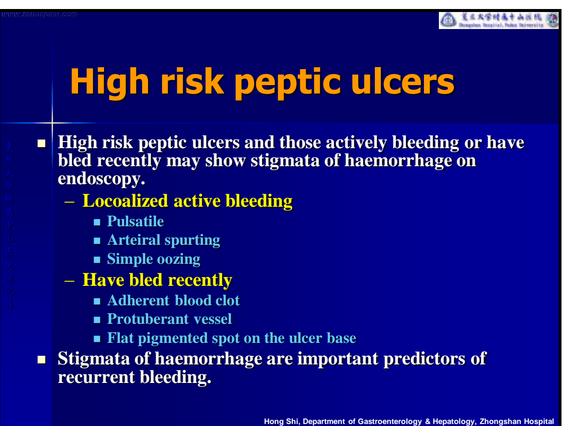

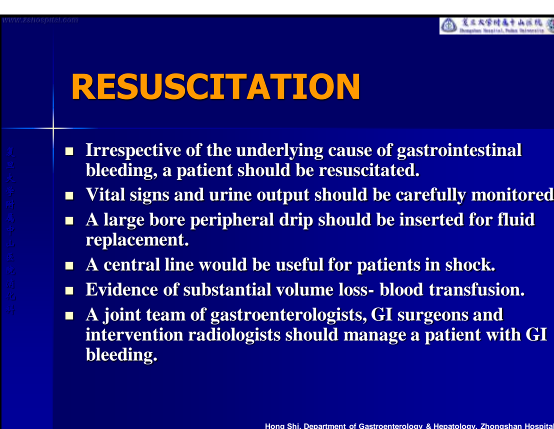

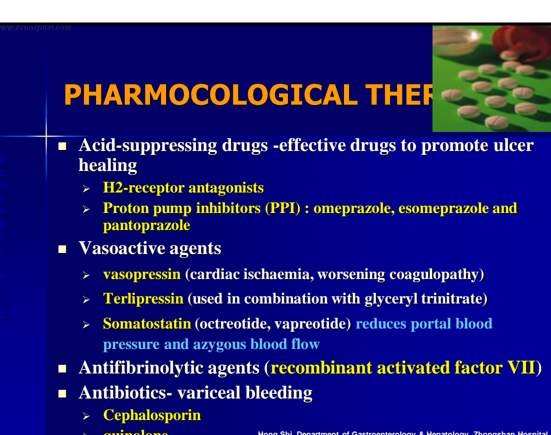

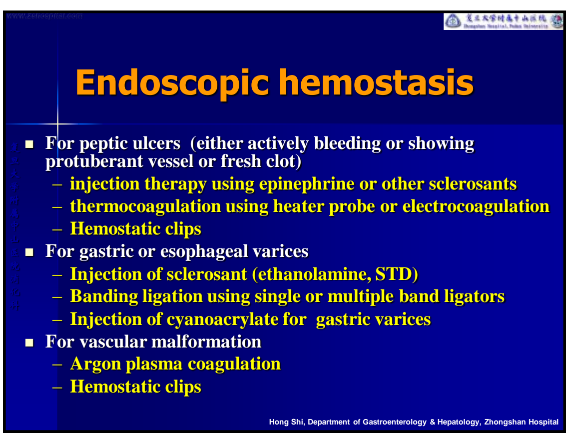

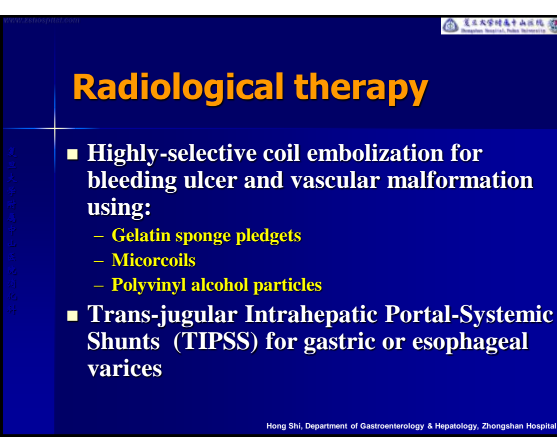

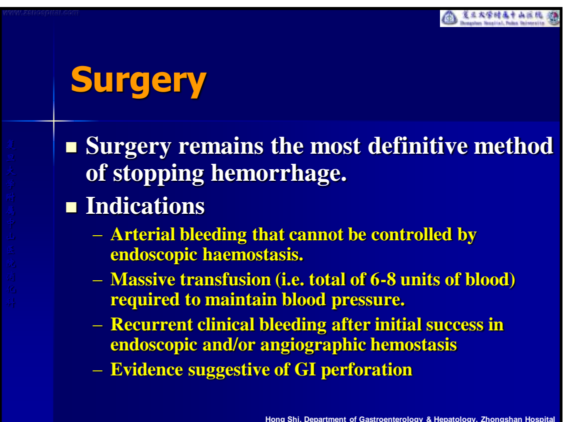

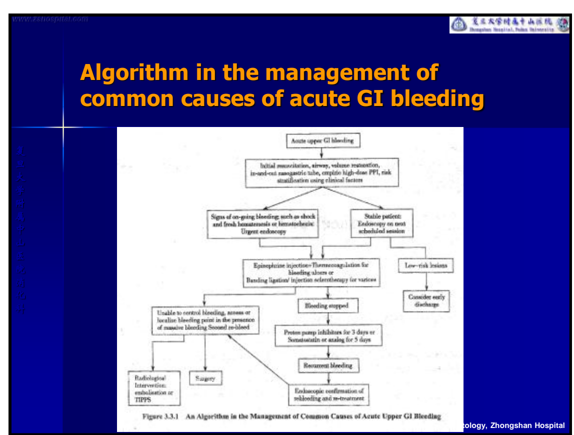

G.I. Bleeding Case

- 58-year-old man
- Black unformed stools, nausea, epigastric pain.
- 10 years ago he had an ulcer.
- He has a daily alcohol intake of two bears.
- He has been taking one enteric-coated aspirin each day.

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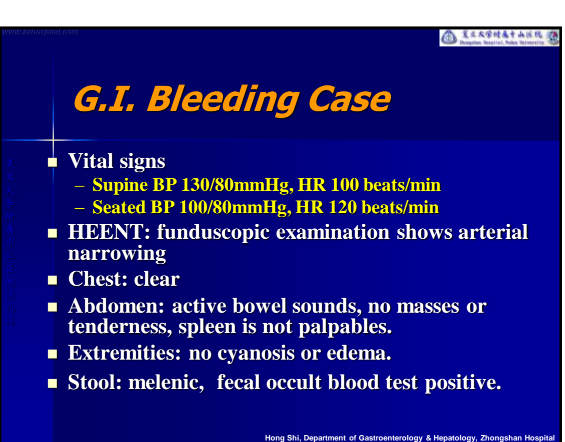

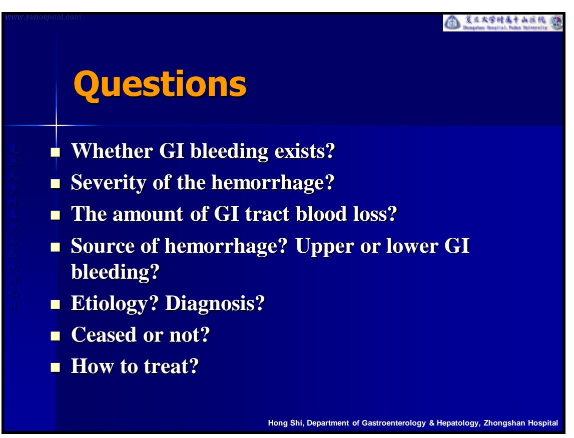
Questions
Whether GI bleeding exists?
Severity of the hemorrhage?
The amount of GI tract blood loss?
Source of hemorrhage? Upper or lower GI bleeding?
Etiology? Diagnosis?
Ceased or not?
How to treat?
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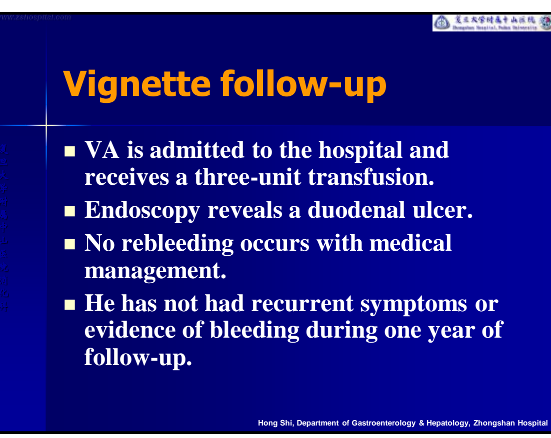
Vignette follow-up
VA is admitted to the hospital and receives a three-unit transfusion.
Endoscopy reveals a duodenal ulcer.
No rebleeding occurs with medical management.
He has not had recurrent symptoms or evidence of bleeding during one year of follow-up.
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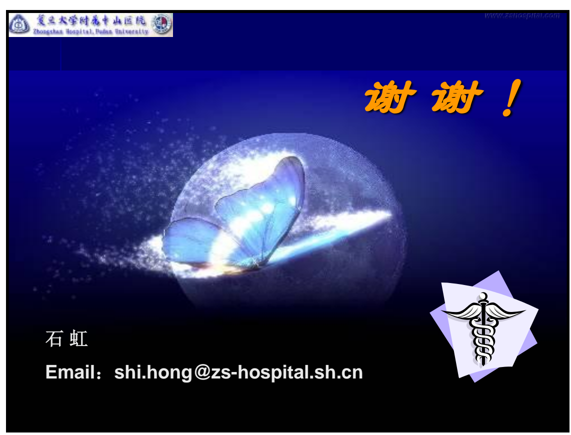
谢 谢 ！
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