Cancer Surveillance in Patients with Primary Sclerosing Cholangitis (PSC)

Gregory Gores, M.D.
Chair of Division of Gastroenterology and Hepatology

May 5th, 2012
Decision-Making Analysis for Surveillance

Population at Risk: PSC

Surveillance Strategy: Available Accessible Acceptable

Early Detection: Treatment

Improved Outcomes: Survival

Cost Effectiveness
Epidemiology of Cholangiocarcinoma (CCA) in PSC

• Only 10% develop CCA within 10 years after the initial PSC diagnosis
Surveillance Modalities for CCA

• Available screening tests
  • Blood test
  • CA 19-9

• Imaging studies
  • Ultrasound
  • Computer tomography
  • MRI with MRCP – most sensitive
CCA Surveillance in PSC

Population at Risk: PSC

Surveillance Strategy
CCA: MRI/MRCP CA 19-9

Treatment: Liver Transplantation

Improved Outcomes: Survival

Cost Effectiveness???
Mayo Clinic Recommendations for CCA Surveillance in PSC

N Razumilava et al., Hepatol, 2011
Epidemiology and Surveillance of Hepatocellular Carcinoma (HCC) in PSC

- HCC prevalence – 2%
  - At risk population – only patients with cirrhosis

- Surveillance - imaging studies (US, MRI) in patients with cirrhosis at least yearly
Epidemiology of Colorectal Cancer (CRC) in PSC

- 50-80% of PSC patients have IBD
- 2-7.5% of IBD patients have PSC
- Cancer risk is increased in PSC/IBD versus IBD alone

RM Soetikno, GIE, 2002
Surveillance Modalities for CRC in PSC

- AASLD and EASL recommendations:
  1. PSC without known IBD - total colonoscopy with biopsies at time of PSC diagnosis
  2. If IBD with PSC - total colonoscopy should be repeated every 1-2 years

R Chapman, Hepatol, 2010
Clinical practice guidelines panel, J of Hepatol, 2009
CRC Surveillance in PSC

Population at Risk: PSC

Surveillance Strategy
CRC: Annual Colonoscopy

Treatment: Total Proctocolectomy

Improved Outcomes: Survival

Cost Effectiveness?
LGD management? Pouchitis?
Liver Decompensation?
Epidemiology of Gallbladder (GB) Neoplasia in PSC

- GB neoplasia prevalence in PSC – 6-14%

Surveillance Modality for GBN in PSC

• AASLD and EASL recommendations:
  1. Annual imaging study to detect mass lesion in the GB
  2. If GB mass present → cholecystectomy regardless of lesion size, “if the underlying liver disease permits”
  3. Mayo study suggests polyps <0.6 cm can be observed over time

R Chapman, Hepatol, 2010; Practice guidelines, J of Hepatol, 2009; Eaton et al., Am J of Gastro, 2011
GBC Surveillance in PSC

Population at Risk: PSC

Surveillance Strategy:
GBC: Annual US or MRI

Treatment:
Surgery with Cholecystectomy

Improved Outcomes:
Survival

Cost Effectiveness?
Polyps <0.6 cm?
Should Patients with PSC Take Ursodeoxycholic Acid (UDCA)?

- UDCA: No Benefits
  1. No benefits for survival with low dose
  2. ↑risk of CRC and poor liver outcomes with high dose

Eaton et al., Am J of Gastro, 2011
N Razumilava et al., Hepatol, 2011
Cancer Surveillance in PSC: Take Home Messages

- **CCA, GB neoplasia, and HCC:**
  1. MRI/MRCP + CA 19-9 on annual basis
  2. Reserve ERCP for abnormal MRI/MRCP

- **CRC:**
  1. Total colonoscopy with Bx at time of PSC Dx
  2. Annual colonoscopy with surveillance Bx from time of IBD/PSC Dx
Acknowledgements

• Dr. Gregory Gores
• Dr. Keith Lindor
• Dr. Nataliya Razumilava
THANK YOU