Virtual colonoscopy is unlikely to reduce the need for optical colonoscopy

To the Editor,

The article by Benson M et al was read with interest [1]. I agree with the authors that CT colonography (CTC) is unlikely to replace optical colonoscopy (OC) completely given the 'therapeutic' advantage that rests with OC. Besides this, the advantage of taking biopsies, washing colonic mucosa and using additional imaging such as narrow-band imaging rests with OC. However, CTC might become the 1st choice in the future as patients prefer CTC over OC as it has a better acceptance [2]. Until then, CTC should complement OC with OC remaining the gold standard' in diagnosing colorectal cancer.

The authors note that despite CTC program there was an increase in the number of OCs performed. Studies comparing CTC vs OC have usually used the same bowel cleansing methods [3]. I note that the bowel cleansing used for CTC and OC in Benson et al's study was different. It would be important to find out if some of the patients who had sameday colonoscopy following a positive CTC required additional or different bowel cleansing on another day. This might have increased the number of colonoscopies performed.

I note that there was an 8% referral rate from CTC to OC, however it might be higher sometimes [4]. Perhaps given a choice to patients, they might be choosing OC instead of CTC if we mentioned to them that 8% of them would require OC anyway. There is an overall increase in the number of colonoscopies performed anyway [5]. Besides this, finding of adenomas will contribute to increase the need for follow up OC surveillance. Hence, CTC is unlikely to significantly reduce the need for optical colonoscopy.

Muhammed Thoufeeq

Peterborough City Hospital Peterborough, UK

Correspondence address: mo.thoufeeq@gmail.com

Conflicts of interest: None to declare.

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Reply

We thank Dr Thoufeeq for his interest in our study on the effect of a CT colonography screening program on colonoscopy screening. The acceptance of CT colonography compared to optical colonoscopy by patients is mixed [1-6]. Both colorectal cancer screening tests clearly have advantages and disadvantages that the other do not possess. We feel that, although colonoscopy should be the gold standard for colorectal cancer screening, CT colonography is an acceptable alternative for patients. Hopefully, CT colonography will increase the overall number of patients screened for colon cancer.

As Dr Thoufeeq noted, the preparations for CT colonography and optical colonoscopy were different for our study. However, the patients undergoing same day colonoscopy following a CT colonography within our program did not require additional or an alternative bowel preparation. Bowel preparations for both screening procedures continue to evolve to increase patient acceptability [7-8]. In summary, as both endoscopic and radiologic technology advances, both colorectal screening methods will have more accurate and better overall patient outcomes. However, despite these future advances, CT colonography and optical colonoscopy will likely continue to be too disparate to truly replace one another.

Mark Benson, Patrick Pfau

Dept of Medicine, Division of Gastroenterology and Hepatology, University of Wisconsin School of Medicine and Public Health Madison, Wisconsin. USA

Correspondence to: Mark Benson

mb4@medicine.wisc.edu

Conflicts of interest: None to declare.

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Idiopathic hepatitis B surface antibody seroreversion after pegylated interferon alpha-2a therapy

To the Editor,

A 40-year-old male with chronic HBV underwent treatment with pegylated interferon alpha-2a. After 48 weeks of treatment, he had a loss of HBsAg, development of anti-HBs, with nondetectable HBV DNA and normal liver function tests. Over a period of one year, the patient was noted to have decreasing antiHBs titers and return of the HBsAg. The patient denied alcohol/ drug abuse, chemotherapy, and immune-suppressive drugs. His HBV-DNA remained low and liver function tests (LFTs) were normal. At follow up, however, his laboratory results remained consistent with a pattern seen in the chronic carrier state.

Chronic hepatitis B remains a major health problem worldwide. Progression to cirrhosis, decompensated liver disease, and hepatocellular carcinoma are the major adverse consequences of untreated disease. Consequently, goals of care revolve around preventing these complications and premature death.

Though nucleos(t)ide analogues aim to control viral replication, virus levels can return to detectable amounts after therapy is stopped. HBV reemergence in previously treated patients remains poorly defined [1]. The term "reactivation" is used interchangeably in the literature to refer to an increase in serum HBV DNA and/or an increase in ALT levels and/ or reappearance of HBsAg. This scenario is better termed seroreversion. More commonly, an increase in HBV DNA levels and a notable chemical "hepatitis" accompany this clinical situation [2]. Such seroreversion has been described following chemotherapy, high-dose steroid use, and bone marrow or hematopoietic stem cell transplantation. Interestingly, our patient remains unique as his scenario does not apply to any of previously described categories.

A high level of cccDNA is predictive of HBsAg seroreversion during chemotherapy [3]. Successful control of HBV is dependent on the complex interplay between the innate, cellular, and humoral responses. Recurrence of hepatitis may be mediated by cytotoxicity from very high intracellular levels of HBV DNA or by loss of immune-mediated control of HBV replication with clearance of infected hepatocytes upon immune reconstitution.

Presentation of HBsAg seroreversion with clinical reactivation ranges from asymptomatic transaminitis to hepatic decompensation and fulminant hepatitis [4]. Seroreversion-related hepatitis has led to severe dysfunction and is also independently associated with a higher risk of developing fulminant hepatic failure [5]. The possible severity of this clinical situation associated with seroreversion of HBsAg should prompt further research and evaluation of the causes, etiologies, and risk factors for this occurrence. Large-scale investigation is warranted to evaluate if other patients in addition to the one we have described have undergone primary spontaneous seroreversion after treatment for chronic hepatitis B.

Donald N. Tsynman, Rene Rivera, Benedict Maliakkal

Department of Gastroenterology and Hepatology University of Rochester, Rochester, MN, USA

Correspondence to: Donald N. Tsynman, MD donald_tsynman@urmc.rochester.edu

Conflicts of interest: None to declare.

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Gastric bezoars – diagnostic and therapeutic challenges

To the Editor,

We checked retrospectively the medical records of all patients diagnosed with gastric bezoars in the Institute of Gastroenterology and Hepatology, Iasi over a 20-year period (1st January 1992 – 31st December 2011). We recorded the demographic data, the type of bezoars, the associated pathology and clinical symptoms, and collected data regarding the medical treatment and the equipment used in endoscopic therapy, techniques employed, success/failure rates and complications.

Gastric bezoars are relatively rare [1]: there were 49 cases in 20 years (0.068% from all endoscopies). The majority were single phytobezoars – 34 cases (formed from *Symphytum officinale* roots). The size of the bezoars ranged from 1 to 10 cm; 24 (48.97%) had 2-3cm in diameter. The patients' ages were between 29 and 88 years, with a mean of 58.4 years. In most cases (85.71%), the presence of bezoars was associated with other conditions such as peptic ulcer disease, diabetes mellitus and previous gastric surgery [2, 3]. The predominant symptoms were, in order of frequency, epigastric pain, nausea, vomiting and weight loss.

Based on existing evidence [4-6], we evaluated in 12 patients the efficacy of bezoar dissolution by Coca-Cola, 4800ml ingested in 12 hours (100ml every 15 minutes). There were 12 single phytobezoars, all in the stomach, with a mean diameter of 5 cm (ranges 3 to 7cm). All patients except one underwent upper gastrointestinal endoscopy prior and 24–48 hours after administration of Coca-Cola. In 5 patients we found sustained complete dissolution of the bezoar and in 5 patients fragmentation of the bezoar in small pieces. Coca-Cola ingestion was successful in 83.33% of cases, with complete dissolution in 41.66%.

Endoscopic therapy was performed in 27 patients. In 11 patients, fragmentation of the bezoar was followed by extraction. The endoscopic accessories used, in order of frequency, were: polypectomy snare, rat tooth grasper, three nail grasper, Dormia basket and biopsy forceps [7]. Successful therapy was noted in 24 of 27 cases (88.7%).

In our experience, female gender, multiple or large bezoars and trichobezoars represented risk factors for endoscopic treatment failure. We registered one major complication, i.e. trapping of a polypectomy snare in a gigantic bezoar (10 cm in diameter). The snare could not be removed and the patient was referred for surgery. Overall, medical and/or endoscopic therapy was successful in 31 out of the 34 treated patients (91.17%).

In conclusion, in our area gastric bezoars are a rare pathology, associated mostly with peptic ulcer, gastric surgery and diabetes mellitus. Most bezoars are phytobezoars. Medical treatment with Coca Cola and/or endoscopic treatment are safe and efficient.

Catalina Mihai¹, Bogdan Mihai², Vasile Drug¹, Cristina Cijevschi Prelipcean¹

 Center of Gastroenterology and Hepatology, 2) Clinical Center of Diabetes and Metabolic Diseases,
University of Medicine and Pharmacy "Gr. T. Popa"

Iasi, Romania

Correspondence to: Catalina Mihai catalinamihai@yahoo.com

Conflicts of interest: None to declare.

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Outcome of hemodialysis patients with occult hepatitis B virus infection at a 4 year follow-up

To the Editor,

Occult hepatitis B infection (OBI) is defined as the presence of HBV-DNA in serum, liver or both without detection of HBsAg [1]. Occult hepatitis B infection might be transmitted via hemodialysis, blood transfusion and organ transplantation [2]. Several reports have shown that HD patients with both occult and chronic HBV infection had low levels of HBV-DNA which remained low and stable over time [3-5]. This is the first report of an evaluation of hemodialysis patients with OBI after 4 years, to investigate whether OBI is a long lasting condition or not.

Of the nine hemodialysis patients having only anti HBc, with OBI diagnosed in 2008, one patient was not available and six patients were deceased from unrelated causes to liver disease. The remaining two individuals were asymptomatic for hepatobiliary complaints. Physical examinations and ultrasound studies of the liver were normal in both of them. Laboratory tests showed normal values of hepatic aminotransferases. Anti-HCV, anti-HIV and HBsAg were negative in both cases. Presence of HBV-DNA was confirmed using real time PCR. One of the two patients remained HBV-DNA positive. This patient was a 57 year old female with 5 years duration of hemodialysis and history of hypertension and blood transfusion. She remains anti-HBc positive and anti-HBs have also appeared.

The other patient was a 49 year old male with 7 year duration of hemodialysis without any underlying disease. HBV-DNA was cleared in this case, anti-HBc had disappeared and anti-HBs were revealed. His medical history evidenced a HBV vaccination about 3 years ago.

The results of this study suggest that OBI in the absence of concurrent liver disease does not appear to be associated with long term adverse clinical outcomes. Since only two OBI patients were available, no firm conclusion could be drawn regarding whether OBI is a long lasting condition or not.

Amitis Ramezani^{1,2}, Mohammad Banifazl³, Ali Eslamifar¹, Farrokhlagha Ahmadi⁴, Effat Razeghi⁴, Arezoo Aghakhani¹

 Clinical Research Dept., Pasteur Institute of Iran; 2) Pediatric Infectious Disease Research Center, Tehran University of Medical sciences; 3) Iranian Society for Support of Patients with Infectious Diseases; 4) Nephrology Research Center, Tehran University of Medical Sciences, Tehran, Iran

Correspondence to: Arezoo Aghakhani araghakhani@hotmail.com

Conflicts of interest: None to declare.

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