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LETTERS

## No rationale for use of combination of quinolones and anti-protozoal agents for acute diarrhea in India

### To the Editor:

Despite lack of rationale for the use of a combination of quinolones and anti-protozoal agents in the management of acute diarrhea in India; it is the most common prescription. These brands have a large market share of >200 crores and there are >70 brands. This combination is a very “Indian” and does not figure in any standard pharmacopoeia.

There is no rationale for the use of combinations of quinolones and anti-protozoal in patients with acute diarrhea due to the following reasons. Most acute diarrheas in adults are self-limiting, and require only oral rehydration therapy. Antibacterials like quinolones are required in certain specific situations. Anti-protozoals are not routinely indicated as giardia and ameba are uncommon causes of acute diarrhea.

Studies from the CIWEC clinic in Nepal, a CDC accredited center evaluating nearly 2000 cases of acute diarrhea every year, have shown that amebic and giardial infection constitute only 1% each of all acute diarrheas.<sup>1</sup> Studies from Indonesia in 3875 adults with acute diarrhea also show similar results.<sup>2,3</sup> Black *et al* also showed that amongst 179 Indian children with acute diarrhea, only 2% had giardial infection and none had amebic infection.<sup>4</sup> Thus, acute onset diarrhea occurring within <7 days after an unhygienic food exposure, especially if associated with fever and vomiting is highly unlikely to be of protozoal etiology. Amebic or giardia infection warrant treatment for 7–10 days instead

of 5 days as required for bacterial infections. Most patients, prescribed this combination, do not complete the course of treatment because of side effects of the imidazole group of drugs, thus defeating the purpose of therapy.

Rational use of all drugs is a cornerstone for good clinical practice. When evidence-based medicine seems to be the order of the day, we still seem to go by “gut feelings of the doctors”. It is high time we look at this issue squarely and decide what is best for our patients.

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### References

1. Shlim DR. Update in traveler's diarrhea. *Infect Dis Clin North Am* 2005;19:137–49.
2. Oyoyo BA, Lesmana M, Subekti D, *et al*. Surveillance of bacterial pathogens of diarrhea disease in Indonesia. *Diagn Microbiol Infect Dis* 2002;44:227–34.
3. Oyoyo BA, Subekti D, Tjaniadi P, *et al*. Enteropathogens associated with acute diarrhea in community and hospital patients in Jakarta, Indonesia. *FEMS Immunol Med Microbiol* 2002;34:139–46.
4. Black RE. Persistent diarrhea in children of developing countries. *Pediatr Infect Dis J* 1993;12:751–64.

## Diffuse gastric metastatic infiltration of the colon

### To the Editor:

Adenocarcinoma of the stomach represents more than 90% of gastric malignant tumors. The liver is the most common location of hematogenous metastasis.<sup>1</sup> The large intestine is an unusual site of metastasis from gastric adenocarcinoma. Although direct extension of infiltrating gastric cancer through the gastrocolic ligament into the transverse colon appears to be the commonest type, metastases extending from the ileocecal valve to the sigmoid colon are rare. Stomach adenocarcinoma causes metastases usually within 5 years after gastrectomy. After this period, tumor recurrence is unusual and is estimated to be 6.2 %.

We report a 73-year-old woman who presented with chronic diarrhea, with a history of gastric adenocarcinoma diagnosed 8 years ago. In 1999, a stage IIIb, poorly differentiated, adenocarcinoma of the stomach was diagnosed and the patient was treated with total gastrectomy, splenectomy and esophago-jejunal Roux-en-Y anastomosis followed by course of chemotherapy. Histology of the resected specimens revealed a poorly differentiated ulcerous adenocarcinoma, of mixed-type both diffuse, with a few signet-ring cells (in the surface), and intestinal type (in the lymph nodes).

Six years later, a metastatic tumor to the right ovary (Krukenberg's tumor) was diagnosed and the patient underwent hysterectomy with bilateral salpingo-oophorectomy.

In August 2007, the patient was admitted with chronic watery, non-bloody diarrhea, since 60 days. Clinical evaluation, blood biochemistry, including carcinoembryonic antigen (CEA), CA125, CA19-9 and stool examination were within normal range. Upper GI endoscopy was normal. Colonoscopy revealed diffuse mucosal inflammation, edema, friability and regional micronodular appearance in its entire length (Fig. 1). Histology from these lesions confirmed the diffuse infiltration of the mucosa by a poorly differentiated adenocarcinoma, metastatic from the stomach. Immunohistochemical analysis of the neoplastic cells revealed positivity for pan-cytokeratine, cytokeratine 7 (CK7), hepatocyte paraffin 1 (Hep-Par 1) and CEA. The neoplastic cells were negative for cytokeratine 20 (CK20) and CDX-2.

Previous reports of colonic metastases from gastric adenocarcinoma have reported segmental involvement of the colon.<sup>2-4</sup> Involvement of the entire colon with macroscopic metastasis with micronodular appearance has not been reported earlier.

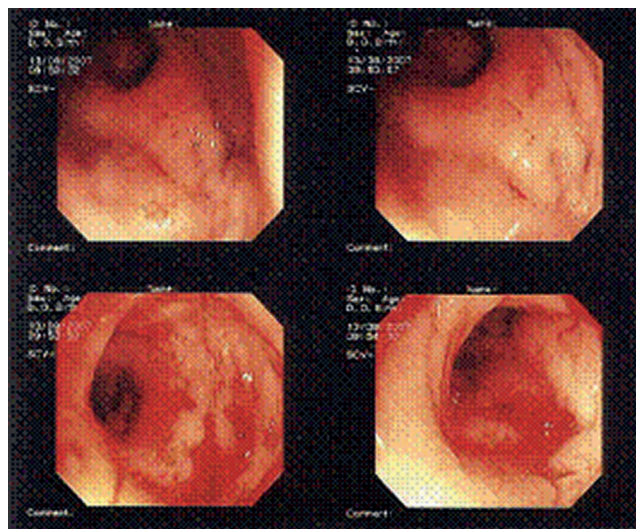
When a signet-ring cell adenocarcinoma (SRCC) is confirmed histologically, in a colonic biopsy, it may be difficult to differentiate primary colonic tumor from metastatic one from the stomach. In such cases, immunohistochemi-

cal stainings pattern may be helpful. The neoplastic cells in colon primary SRCC have CK7 (-)/CK20 (+) staining pattern, whereas the cells in gastric primary SRCC have a CK7 (+) / CK20 (-) pattern.<sup>5</sup> In addition, colon primary SRCC shows 22% Hep Par 1 positivity and homogeneous strong, diffuse CDX2 nuclear staining, whereas gastric primary SRCC shows 83% Hep Par 1 positivity and heterogeneous weak patchy CDX2 nuclear staining.<sup>6</sup> In our case, the pattern of the neoplastic cells was suggestive of a colonic metastatic process from a gastric primary adenocarcinoma.

In summary, this is a unique case, in which the metastasis had a micronodular appearance and extended to all the segments of the colon. Metastases from gastric adenocarcinoma to the large intestine are quite rare, especially later than 5 years after gastrectomy.

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**Fig. 1** Endoscopic appearance of the descending colon mucosa showing diffuse inflammation, edema, friability and micronodular appearance

## References

1. Fuchs CS, Mayer RJ. Gastric carcinoma. *N Engl J Med* 1995;333:32-41.
2. Metayer P, Antonietti M, Oumrani M, Hemet J, Lemoine F, Basuyau J. Metastases of a gastric adenocarcinoma presenting as colonic polyposis. *Dis Colon Rectum* 1991;34:622-3.
3. Iwabuchi M, Hiwatashi N, Suzuki T. Multiple depressed-type colonic cancer (IIc)-like configurations: metastases from gastric cancer. *Dig Endosc* 2002;14:73-7.
4. Tseng LJ, Jao YT, Wu CJ, et al. Metastatic gastric carcinoma presenting as multiple submucosal colonic cysts. *Gastrointest Endosc* 2004;59:317-8.
5. Goldstein NS, Long A, Kuan SF, Hart J. Colon signet ring cell carcinoma: immunohistochemical characterization and comparison with gastric and typical colon adenocarcinomas. *Appl Immunohistochem Mol Morphol* 2000;8:183-8.
6. Chu PG, Weiss LM. Immunohistochemical characterization of signet-ring cell carcinomas of the stomach, breast and colon. *Am J Clin Pathol* 2004;121:884-92.

# Gastroenterology in the developing countries: current situation, future outlook and our duty

## To the Editor:

We enjoyed reading the article by Professor Quigley, President of the World Gastroenterology Organization (WGO).<sup>1</sup> He has rightly stated that though our knowledge of gastroenterology has increased tremendously during the past 50 years, the benefit of these advances to people from developing countries is unclear.

As it is well known,<sup>1-5</sup> limitation of resources is probably the most important dilemma to people in non-developed countries; on the other hand, these limited resources are often allocated to low-priority areas. Thus, the existing limited resources shrink further. For example, the affluent parts of capital cities of non-developed countries have the luxury of well-equipped hospitals and highly-educated doctors to provide the highest level of medical services; in contrast, rural and poorer areas do not even have access to primary health care. Health care in these areas is further compromised because of lack of resource allocation and lack of investment; many trained doctors do not find working in these areas lucrative. Therefore, as Prof. Quigley has pointed out, physicians are more likely to immigrate to the developed countries where they probably can find higher income as well as better social infrastructure.

One other problem in non-developed countries is that region-specific guidelines, which keep in mind limitation of funds and equipments, are not available. Books are written in the developed countries with no consideration for rural regions of developing countries. The need for research focussed on regional problems is well known. Unfortunately, there is a profound lack of professional researchers in developing countries. The few who are involved in research live in large cities, and are oblivious to state of healthcare and lack of resources beyond the city boundaries. To compound this fact, research funds are limited and even these limited resources are misdirected at questions which do not have much relevance to local diseases. Taking a look at research publications from developing countries, a great share of the publications is at variance with the country's health problems. The extremely low rate of citations these articles receive would also corroborate that the results are not used in daily practice or to conduct future studies.

We therefore present some recommendations to policy-makers of developing countries to enhance their countries' practices: 1. to address local problems; 2. to provide optimal healthcare services throughout the country; 3. Funding and conducting well-designed research directed at making region-specific guidelines for use in daily practice; 4. To encourage and empower young doctors.

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## References

1. Quigley EM. Fifty years of world gastroenterology: the World Gastroenterology Organisation 1958-2008. *Indian J Gastroenterol* 2008;27:181-2.
2. Segal I. Gastroenterology research for Africa. *J R Soc Med* 1997;90:578-9.
3. Nyongator F, Kutzin J. Health for some? The effects of user fees in the Volta Region of Ghana. *Health Policy Plan* 1999;14:329-41.
4. Bagheri Lankarani K. Research and study about liver diseases in Iran: past, present and future. *Hep Mon* 2008;8:89-90.
5. Beiraghdar F, Panahi Y, Taheri S. Research and medical study in Iran: new proposals. *Hep Mon* 2008;8:231-2.

## Reply:

I thank Drs Khedmat and Taheri's thoughtful comments on my article in the *Indian Journal of Gastroenterology*.<sup>1</sup> They raise very important and relevant points with respect to medical care and research in developing nations. The World Gastroenterology Organisation (WGO) is well aware of inequities in the resourcing of health care that exist within, as well and between, countries. While the WGO has limited powers to influence government policy in such issues, it does strive to address the equally important issue raised by Drs Khedmat and Taheri about the challenges faced by those who strive to perform locally-or-regionally relevant research in their native countries. They refer to a number of obstacles: funding, research training, appropriateness of research topics, centralization of funds and governance. WGO, through its Train the Trainer's program, attempts to address these issues head on: the program is specifically aimed at young emerging leaders, research methodology is a central component and emphasis is placed on research methods which can be applied to truly relevant local health problems.<sup>2</sup> Indeed, in April 2008, WGO held its first ever workshop specifically devoted to trial design, a program we would be delighted to repeat in the future. The goal of this workshop is to address the very deficit that Drs Khedmat and Taheri describe: skilled researchers devoted to the resolution of local health problems. Such is the per-

ceived dominance of “Western” topics in medical literature that researchers from emerging nations feel compelled to study these topics in order to obtain scientific legitimacy, even though these same disease states may be of minimal relevance to the health of their nation. This is a fundamental error; we can all, East and West, gain much more from good research on local diseases or on local experiences with global problems than from attempts to mimic the West. The invaluable contributions on the topic of esophago-gastric cancer from Drs Khedmat and Taheri’s home nation, Iran, are a case in point.

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#### References

1. Quigley EM. Fifty years of world gastroenterology: the World Gastroenterology Organisation 1958–2008. *Indian J Gastroenterol* 2008;27:181–2.
2. [www.worldgastroenterology.org/train-the-trainers.html](http://www.worldgastroenterology.org/train-the-trainers.html). Accessed March 23rd 2009.

## ISG Travelling Fellowships

### ISG Travel fellowships for attending Gastro 2009, London

The Indian Society of Gastroenterology is pleased to offer around seven International Travel Fellowships to attend Gastro, 2009 at London to be held between 21–25 November 2009 to young Gastroenterologists (<37 years, members of ISG, submitted an abstract to WCOG, has demonstrable consistent commitment to Gastroenterology based on the candidate’s CV). Selection will be done by a panel of judges. Preference will be given to those who have not obtained a travel fellowship from ISG in the last two years.

Aspiring candidates should send copies of their submitted abstracts, CV, and photocopy of their passports to the secretariat by September 30, 2009. Selection results will be announced by early November. A total support amount of Rs 70,000–90,000 will be provided to those selected, on their return and on provision of the following: evidence of attendance, receipt of registration fees, original air-ticket jackets with boarding card and report of their learning experience.

**Please note that the last date for submitting abstracts for Gastro, 2009 is 8th June.** Please hurry and try to make it for Gastro, 2009. Please also visit the official website of at <http://www.gastro2009.org/> to get details about other travel bursaries, fellowships, early bird registration and registration for trainees. For further details, please visit the ISG website <http://isg.org.in>. Please submit the application before the last date to:

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 Hon. Secretary, ISG  
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## News and notices

**Workshops on Biostatistics and Research Ethics** will be organized at Sanjay Gandhi Post Graduate Institute of Medical Sciences between July and September 2009 at Lucknow. Travel support may be available. For further details, Please contact: Dr. Rakesh Aggarwal, Department of Gastroenterology, SGPGI, Lucknow E-mail: [sgpgi.courses@gmail.com](mailto:sgpgi.courses@gmail.com)

**The 18th Annual Meeting of the Indian National Association for Study of Liver** will be held at Bhubaneswar on March 12–14, 2010. For further details, please contact: Prof. S. P. Singh, Organizing Secretary. E-mail: [scb\\_gastro\\_dept@hotmail.com](mailto:scb_gastro_dept@hotmail.com)