

Dr Govind K Makharia

**Additional Professor, Department of Gastroenterology and Human Nutrition
Adjunct Faculty, Clinical Epidemiological Unit, AIIMS**

Professional Qualifications

M.B.B.S.

Patna Medical College Hospital, Patna

M.D.(Internal Medicine) –1995

Postgraduate Institute of Medical Education and Research,
Chandigarh.

D.M. (Gastroenterology) –1997

Postgraduate Institute of Medical Education and Research,
Chandigarh

D.N.B. (Diplomate National Board), Gastroenterology 1999

AWARDS, FELLOWSHIPS AND MEMBERSHIPS:

1. **Sifton Gold Medal (University Gold Medal)**
2. **Young Investigator's Award**, Asia Pacific Congress of Gastroenterology, Hong Kong, 2000
3. **Young Clinician's Award**, World Congress of Gastroenterology, Montreal, Canada, 2005
4. **Alkem Om Prakash Memorial Award** given by the Indian Society of Gastroenterology for outstanding contribution to Gastroenterology as a young scientist.
5. **Award of achievement** by the OESO (Organisation Mondiale d'Esudes Specialisees les Maladies de L'Oesophage
6. **SR Naik Memorial Award, 2010**,
7. **Distinguished Service Award**, Geriatric Society of India

Ongoing Research activity

1. Celiac disease
 - a. Multicenter prevalence estimation of celiac disease
 - b. Marker for detection of villous atrophy
 - c. Tight junction physiology
 - d. Metagenomes in celiac disease
2. Inflammatory Bowel Disease and intestinal tuberculosis
 - a. Differentiation of intestinal tuberculosis from Crohn's disease
 - b. Mycobacterial pathogens in Crohn's disease
 - c. Randomized controlled trial in intestinal tuberculosis
3. Functional Gastrointestinal Diseases

Research grant

From Indian Council of Medical Research
Department of Biotechnology
Department of Science and Technology
Central TB Division, Ministry of Health and Family Welfare, Govt of India

Leadership

International

1. **Member, Asia Pacific Colorectal Cancer Study Group:** Developed a consensus statement for screening of average risk individuals for colorectal cancer and polyps. This consensus statements were published in Gut 2009.
2. **Member, Asia Pacific Working Party on Inflammatory Bowel disease.** Developed Asian Guidelines on ulcerative colitis
3. **Asian Neurogastroenterology Motility association:** Formulated guidelines for management of Irritable bowel syndrome

National Bodies

1. **Governing Council Member,** Indian Society of Gastroenterology
2. Indian Council of Medical Research Task Force on Celiac disease
3. **Coordinator of the National Task Force on Inflammatory Bowel Disease.**
 - a. Collected and analyzed data of >1000 patients with inflammatory bowel disease from all over the country. The data was presented in the TaskForce meeting and ready for publication
 - b. Co-ordinator for developing Indian Consensus on Ulcerative colitis on behalf of Indian Society of Gastroenterology
4. **Member, National Task Force on Irritable Bowel Syndrome**
5. **Governing Board Member,** Indian Association of Motility and Functional Diseases

Publications in national and international journals

Total: 116

Indexed: 81

International: 44

National: 34

Non-indexed: 13

Chapters in books: 22

Annovation

1. **Annovation:** Conceptualized and developed with Stanford India Bio-design a device for anal incontinence. Tested the model in healthy people
2. Conceptualized and developed New Diagnostic Technique: Hybrid imaging
 - a. CT_PET enteroclysis: To know the metabolic activity of the lesion
 - b. CT-PET-Colonography

Membership of Scientific Organization

Indian Society of Gastroenterology
 National Academy of Medical Sciences (MNAMS)
 Society of Gastrointestinal Endoscopy of India
 Indian Association of Studies of the Liver
 Asian Neurogastroenterology and Motility Association
 Indian Society of Parenteral and Enteral Nutrition

Member, Editorial Board

Indian Journal Gastroenterology
 Bangaldesh Hepatology Journal

Reviewership

Journal of Gastroenterology and Hepatology
 Indian Journal of Gastroenterology
 Pancreas
 Indian Journal of Cancer
 Tropical Gastroenterology
 Journal of Pancreas
 Journal of Ethanopharmacology

Scientific contribution:

| Broad subject | New information | Publication |
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| Celiac disease | Estimated prevalence of celiac disease in the community, Prevalence 1% in North Indian Community | J Gastroenterol and Hepatol, 2011 |
| | Randomized controlled trial using steroid in celiac disease | Under publication |
| Differentiation of Crohn's disease and intestinal tuberculosis | Blood in stool, involvement of sigmoid colon, presence of lymphoid follicle, crypt abnormalities and granuloma are most important features for differentiation between Crohn's disease and intestinal tuberculosis. | Published in Am J Gastroenterology, Rated as GOLD STANDARD PAPER by World Gastroenterology Organization |
| | We showed that, ASCA and ANCA does not differentiate between the two | Digestive Disease and Sciences, 2006 |
| Basic studies in Inflammatory bowel disease | Using MR spectroscopy, we demonstrated that formate could a marker to differentiate Crohn's disease from ulcerative colitis | Magnetic Resonance Imaging, 2008 |
| | Using MR spectroscopy, we demonstrated that the even normal area in patients with IBD has the same metabolic profile as involved area | Magnetic Resonance Imaging, 2010 |

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| | We demonstrated that almost 80% of patients with IBD in India have low mineral density. Avoidance of milk and milk products by patients with IBD is a myth. | Indian J Gastroenterology, 2008 |
| Newer imaging technique PET CT Enteroclysis | We developed a new technique for assessment of inflammatory activity of intestine | European Journal of Nuclear Medicine and Molecular Imaging, 2007 |
| Asia Pacific Study on Colorectal cancer and polyp | In a multinational study, we demonstrated the status of colorectal polyps in asymptomatic individuals | GI Endoscopy, 2007 |
| | Consensus guidelines for screening of average risk individual for colorectal cancer | Gut 2008 |
| Achalasia cardia | Demonstrated that more than 50% of patients with achalasia have structural and functional changes in the lungs, most likely due to microaspiration | Journal Neurogastroenterology and Motility 2009 |
| | Demonstrated differential activation of brain areas in achalasia as compared with healthy controls, suggesting that multiple areas in brain are affected in achalasia | |
| Irritable Bowel syndrome | We demonstrated that the fiber intake in patients with IBS is similar to healthy Indian, therefore there may not be a rationale of fibre supplementation for Indian patients with IBS unlike Western guidelines. | Indian J Gastroenterol |

Key Publications

1. Makharia GK, Verma AK, Amarchand R, Goswami A, Singh P, Agnihotri A, Suhail F, Krishnan A. Prevalence of irritable bowel syndrome: a community based study from northern India. *J Neurogastroenterol Motil.* 2011 Jan;17(1):82-7.
2. Makharia GK, Verma AK, Amarchand R, Bhatnagar S, Das P, Goswami A, Bhatia V, Ahuja V, Datta Gupta S, Anand K. Prevalence of celiac disease in the northern part of India: A community based study. *J Gastroenterol Hepatol.* 2011 May;26(5):894-900.
3. Gwee KA, Bak YT, Ghoshal UC, Gonlachanvit S, Lee OY, Fock KM, Chua AS, Lu CL, Goh KL, Kositchaiwat C, Makharia G, Park HJ, Chang FY, Fukudo S, Choi MG, Bhatia S, Ke M, Hou X, Hongo M. Asian consensus on irritable bowel syndrome. *J Gastroenterol Hepatol.* 2010;25:1189-205.
4. Sharma U, Singh RR, Ahuja V, Makharia GK, Jagannathan NR. Similarity in the metabolic profile in macroscopically involved and un-involved colonic mucosa in patients with inflammatory bowel disease: an in vitro proton ((1)H) MR spectroscopy study. *Magn Reson Imaging.* 2010;28:1022-9.
5. Ooi CJ, Fock KM, Makharia GK, Goh KL, Ling KL, Hilmi I, Lim WC, Kelvin T, Gibson PR, Geary RB, Ouyang Q, Sollano J, Manatsathit S, Rerknimitr R, Wei SC, Leung WK, de Silva HJ, Leong RW; Asia Pacific Association of Gastroenterology Working Group on Inflammatory Bowel Disease. The Asia-Pacific consensus on ulcerative colitis. *J Gastroenterol Hepatol.* 2010;25:453-68.
6. Sharma SK, Singla R, Sarda P, Mohan A, Makharia G, Jayaswal A, Sreenivas V, Singh S. Safety of 3 different reintroduction regimens of antituberculosis drugs after development of antituberculosis treatment-induced hepatotoxicity. *Clin Infect Dis.* 2010 ;50:833-9.
7. Makharia GK, Singh UB. In the search of a cause of Crohn's disease. *Indian J Gastroenterol.* 2009;28:165-8.
8. Makharia GK, Srivastava S, Das P, Goswami P, Singh U, Tripathi M, Deo V, Aggarwal A, Tiwari RP, Sreenivas V, Gupta SD. Clinical, endoscopic, and histological differentiations between Crohn's disease and intestinal tuberculosis. *Am J Gastroenterol.* 2010;105:642-51.
9. Das CJ, Makharia GK, Kumar R, Kumar R, Tiwari RP, Sharma R, Malhotra A. PET/CT colonography: a novel non-invasive technique for assessment of extent and activity of ulcerative colitis. *Eur J Nucl Med Mol Imaging.* 2010;37:714-21.
10. Gupta R, Reddy DN, Makharia GK, Sood A, Ramakrishna BS, Yachha SK, Thapa BR, Banerjee R, Anuradha S, Dutta U, Puri AS, Jain AK, Mulder CJ, Kumar A, Boindala S. Indian task force for celiac disease: current status. *World J Gastroenterol.* 2009;15:6028-33.
11. Sood A, Midha V, Makharia GK, Ahuja V, Singal D, Goswami P, Tandon RK. The probiotic preparation, VSL#3 induces remission in patients with mild-to-moderately active ulcerative colitis. *Clin Gastroenterol Hepatol.* 2009;7:1202-9.

12. Makharia GK, Seith A, Sharma SK, Sinha A, Goswami P, Aggarwal A, Puri K, Sreenivas V. Structural and functional abnormalities in lungs in patients with achalasia. *Neurogastroenterol Motil.* 2009;21:603-8
13. Das K, Ghoshal UC, Dhali GK, Benjamin J, Ahuja V, Makharia GK. Crohn's disease in India: a multicenter study from a country where tuberculosis is endemic. *Dig Dis Sci.* 2009;54:1099-107.
14. Sung JJ, Lau JY, Young GP, Sano Y, Chiu HM, Byeon JS, Yeoh KG, Goh KL, Sollano J, Rerknimitr R, Matsuda T, Wu KC, Ng S, Leung SY, Makharia G, Chong VH, Ho KY, Brooks D, Lieberman DA, Chan FK; Asia Pacific Working Group on Colorectal Cancer. Asia Pacific consensus recommendations for colorectal cancer screening. *Gut* 2008;57:1166-76.
15. Balasubramanian K, Kumar S, Singh RR, Sharma U, Ahuja V, Makharia GK, Jagannathan NR. Metabolism of the colonic mucosa in patients with inflammatory bowel diseases: an in vitro proton magnetic resonance spectroscopy study. *Magn Reson Imaging.* 2009;27:79-86.
16. Das CJ, Makharia G, Kumar R, Chawla M, Goswami P, Sharma R, Malhotra A. PET-CT enteroclysis: a new technique for evaluation of inflammatory diseases of the intestine. *Eur J Nucl Med Mol Imaging.* 2007;34:2106-14.
17. Makharia GK, Sachdev V, Gupta R, Lal S, Pandey RM. Anti-Saccharomyces cerevisiae antibody does not differentiate between Crohn's disease and intestinal tuberculosis. *Dig Dis Sci.* 2007;52:33-9.
18. Makharia G. Where are Indian adult celiacs? *Trop Gastroenterol.* 2006;27:1-3.
19. Makharia GK. Rising incidence and prevalence of Crohn's disease in Asia: is it apparent or real? *J Gastroenterol Hepatol.* 2006;21:929-31.