The Gut and the Liver

January 28 – 29, 2010
CAESAR
Center of Advanced European Studies and Research
Bonn, Germany
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Preface

The Gut and the Liver

Three large organ systems guarantee the direct exchange with our surroundings: the skin, the lungs and the intestine. This embeds us into the greater context of nature – below the level of consciousness.

Of these three, the gut is most important as an entry site for a multitude of different molecules of nutrition, as well as for microorganisms. They may pass the intestinal border and move to internal structures of our body where a new cross talk begins: be it benign or disease causing. One of the systems closely linked to the gut via the portal tract is the liver. The interlude between both with respect to immune response, induction of inflammation or change of metabolism is the topic of this workshop.

The gut is not only a window to our surroundings but also – via the epithelium and the attached immunological system – an active processor of molecules and organisms that contact or penetrate its luminal site. There are common mediators like bile acids or hormones that regulate both, the gut and the liver, and tune them to each other. These are further issues of the workshop.

Of course, the topic is vast and diverse and only flashlights can be covered by such a symposium. Nevertheless, we hope that it not only allows presenting some established and new concepts to the audience but also induces a fruitful discussion and some new ideas thanks to a group of well known lecturers and chairmen who have been kind enough to join us in Bonn.

I thank the scientific committee, Ulrich Beuers, Percy Knolle, Jacob Nattermann and Ulrich Spengler for their most valuable input in the planning of the program and we all are grateful to the Falk Foundation that allows us to continue the tradition of a premeeting to the German Association for the Study of the Liver (GASL).

Tilman Sauerbruch
The 26th Annual Meeting of the German Association for the Study of the Liver will follow the Falk Workshop: January 29, 12.30 to January 30, 13.00 h

Scientific Organization:
U. Beuers, Amsterdam (Netherlands)
P. Knolle, Bonn (Germany)
J. Nattermann, Bonn (Germany)
T. Sauerbruch, Bonn (Germany)
U. Spengler, Bonn (Germany)

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Official Language:
English
Thursday, January 28, 2010

11.00 Welcome lunch

12.00 Welcome

T. Sauerbruch, Bonn

Session I
Immune function

Chair: P. Knolle, Bonn; J. Nattermann, Bonn

12.10 Lymphocyte homing to the gut and liver
D. H. Adams, Birmingham

12.40 Septic immune paralysis – Cross-talk between gut, liver and spleen
A. Limmer, Bonn

13.10 Plasticity of dendritic cell function – Influence of gut derived products
A. W. Thomson, Pittsburgh

13.40 Lunch break with poster session

Session II
Biliary system

Chair: D. Häussinger, Düsseldorf; G. A. Kullak-Ublick, Zurich

14.30 Bile acids as mediators of the gut/liver interaction: The role of nuclear receptors
A. Moschetta, Bari

15.00 Is FGF19 signaling from gut to liver disturbed in NAFLD?
P. L. M. Jansen, Amsterdam

15.30 The role of the intestine in the formation and prevention of gallstones
F. Lammert, Homburg

16.00 The bile ducts in chronic inflammatory bowel disease
U. Beuers, Amsterdam

16.30 Coffee break with poster session
Thursday, January 28, 2010

Session III
Metabolism (1)

Chair: B. Siegmund, Berlin; M. V. Singer, Mannheim

17.00  Bile acid signaling and control of metabolism  K. Schoonjans, Lausanne

17.30  The intestine and fatty liver disease  C. Hellerbrand, Regensburg

18.00  Gut barrier dysfunction and alcoholic liver disease  R. K. Rao, Memphis

18.30  End of afternoon session
**Friday, January 29, 2010**

**Session IV**  
**Metabolism (2)**

**Chair:** U. Spengler, Bonn; W. Stremmel, Heidelberg

- **8.30** Drug metabolism: The gut and the liver  
  M. Schwab, Stuttgart

- **9.00** Regulatory mechanisms involved in HFE hereditary hemochromatosis  
  M. Muckenthaler, Heidelberg

- **9.30** Gut-liver-brain axis: Consequences of liver dysfunction  
  D. Häussinger, Düsseldorf

- **10.00** Coffee break with poster session

**Session V**  
**The gut as entry site for microorganisms**

**Chair:** A. L. Gerbes, Munich; H. Tilg, Innsbruck

- **10.30** The role of bacterial translocation  
  A. Albillos, Madrid

- **10.50** Gut Liver Communication – the Role of Bacterial Translocation in Hepatic and Systemic Disease  
  C. Trautwein, Aachen  
  L. Sander, New York

- **11.10** Intestinal flora in liver cirrhosis: A therapeutic tool?  
  R. Wiest, Regensburg

- **11.30** Tapeworm eggs: From gut to liver – Pathogenesis, prevention and treatment  
  P. Kern, Ulm

- **12.00** Farewell  
  U. Beuers, Amsterdam

- **12.10** Farewell lunch

- **12.30** Opening of the Annual Meeting of the GASL
Poster Session

Posters will be exhibited on January 28–29, 2010, at the CAESAR Bonn. The authors will be in attendance during coffee and lunch breaks on both days.

1. Endotoxin receptor CD14 gene expression in chronic hepatitis C
   E. Askar, R. Bregadze, G. Ramadori, S. Mihm (Göttingen, D)

2. Effect of gadolinium chloride on liver regeneration following thioacetamide-induced necrosis in rats
   M. Bautista, M. Cascales, D. Andrés, J.A. Morales González, M.I. Sánchez Reus (Pachuca, Hgo., MEX; Madrid, E)

3. Antifibrotic properties of NOV/CCN3 in liver
   E. Borkham-Kamphorst, J. Herrmann, R. Weiskirchen (Aachen, D)

4. Association of CD14 gene variations with hepatic CD14 gene expression, serum soluble CD14 (sCD14) concentration and liver fibrosis progression in patients with chronic hepatitis C
   R. Bregadze, E. Askar, G. Ramadori, S. Mihm (Göttingen, D)

5. Non-alcoholic liver disease – Gut-related symptoms and liver fibrosis correlations
   D.N. Dascalu, M. Deac (Sibiu, RO)

6. TGF-beta inhibitor Smad7 - Ambiguous functions during hepatocarcinogenesis
   J. Dzieran, J. Fabian, T. Maass, A. Teufel, S. Dooley, N.M. Meindl-Beinker (Mannheim, Mainz, D)

7. Comparative analysis of phase I and II enzyme activities in 6 hepatoma cell lines identifies Huh-7 cells to have the highest potential to study drug metabolism
   S. Ehnert, J. Lin, N. Nussler, L. Liu, A.K. Nussler (Munich, D; Shantou, Wuhan, RC)

8. Does caffeic acid phenethyl ester (CAPE) have ameliorating effects on acetic acid-induced experimental colitis model in rats?
   E. Erarslan, C. Turkay, H. Özyurt, C. Koca, B. Kasapoglu, R. Bayrak (Ankara, Tokat, TR)

9. Accelerated larval growth of Echinococcus multilocularis in the immunodeficient host?
   B. Gruener, G. Härter, K. Wahlers, P. Kern (Ulm, D)

10. Impact of disturbed glucose tolerance on 90-day mortality in patients with decompensated liver cirrhosis
    S. Hagel, T. Bruns, A. Herrmann, A. Stallmach, C. Schmidt (Jena, D)
11. Interleukine-18 and CD95-lymphocytes in liver cirrhosis caused by chronic hepatitis B  
B. Ilyassova (Almaty, KAS)

12. Resveratrols weak toxicity on tumor cells of liver origin  
D. Knobeloch, L. Hao, S. Ehnert, L. Liu, M. Glanemann, A. Nüssler (Berlin, Munich,  
D; Tongji, RC)

13. Analysis of the common vasoactive intestinal peptide receptor 1 polymorphism  
in gallstone patients  
M. Krawczyk, F. Grünhage, M. Acalovschi, F. Lammert (Homburg, D; Cluj-Napoca, RO)

14. Autotaxin and its product, lysophosphatidic acid, are potential mediators of  
cholestatic pruritus  
A.E. Kremer, J.J. Martens, W. Kulik, C. Williamson, W.H. Moolenaar, J. Kondrackiene,  
U. Beuers, R.P.J. Oude Elferink (Amsterdam, NL; London, GB; Kaunas, LT)

15. Polyphenoles: A class of compounds with diverse interferences in hormonal and  
morphogen signaling of liver and gut carcinomas  
K.S. Lerche, F. Götschel, R. Günther, J. Kolander, L. Teich, S. Zellmer, H. Hofmann,  
K. Eger, A. Hecht, F. Gaunitz, R. Gebhardt (Leipzig, Freiburg, D)

16. Bone morphogenetic protein 9 (BMP-9) plays a potential role in liver regeneration  
Q. Li, H. Gaitantzi, A. Müller, J. Hengstler, S. Dooley, K. Breitkopf (Mannheim,  
Dortmund, D)

17. Giant liver hematoma complicating ERCP. A case report  

18. Phosphatidylcholine antagonizes ethanol-induced changes of intestinal barrier  
function  
K. Mitzscherling, V. Volynets, A. Parlesak, C. Bode (Stuttgart, D; Lyngby DK)

19. Detection of Helicobacter rodentium-like DNA in the liver tissue of patients with  
chronic liver diseases by PCR-DGGE and sequence analysis  
J. Nakonieczna, P. Stalke, W.A. Al-Soud, T. Wadström, K.P. Bielawski (Gdansk, PL;  
Lund, S)

20. Expression of the receptor for advanced glycation end products (RAGE) in hepatitis C  
patients with varying degrees of hepatic fibrosis  
D. Neureiter, C. Lohwasser, S. Stintzing, Y. Popov, D. Schuppan (Salzburg, A;  
Erlangen, D; Boston, USA)
21. Cyclin E1 controls the cell cycle activity of hepatic stellate cells and triggers fibrogenesis in mice
Y.A. Nevzorova, J.-M. Bangen, N. Gassler, U. Haas, R. Weiskirchen, F. Tacke, P. Sicinski, C. Trautwein, C. Liedtke (Aachen, D; Boston, USA)

22. Doppler ultrasound evaluation in portal hypertension due to liver cirrhosis. Relationship with etiology, severity and nutritional status
C. Niculescu, O. Pascu, R. Badea (Cluj-Napoca, RO)

23. Alterations of oro-cecal transit time in liver cirrhosis before and after the intake of a probiotic - A pilot study
P. Nikolov (Sofia, BG)

24. Serotonin level in serum of patients with inflammatory bowel disease
D. Panova, Z. Krastev (Sofia, BG)

25. Unexpected increased oxidative burst in patients with severe liver cirrhosis
J. Peter, T. Bruns, A. Herrmann, J. Brenmoehl, A. Stallmach (Jena, D)

26. Defects in bile production associated with intestinal blastocytosis
N.I. Potaturkina-Nesterova, A.S. Nesterov, L.L. Elistratova, A.V. Kurzin, I.S. Bakirov (Ulyanovsk, R)

27. Alterations in intestinal microflora
N.I. Potaturkina-Nesterova, A.S. Nesterov, I.S. Bakirov, A.V. Myasnikova, S.A. Nesterov (Ulyanovsk, R)

28. Improved differentiation of hepatocyte-like cells from adipose tissue via epigenetic changes: Possible application for cell therapies in surgery

29. Coexistence of colorectal cancer with reactive inflammatory changes and fatty liver. Preliminary studies
M.E. Sobaniec-Lotowska, J.M. Lotowska, M. Sidorska (Bialystok, PL)

30. The correlation of Helicobacter spp. 16S rRNA gene, IL-1 and IL-8 mRNA expression in the liver specimens in patients with chronic liver diseases
P. Stalke, J. Nakonieczna, M. Rybicka, K.P. Bielawski (Gdansk, PL)

31. Intraperitoneal LPS enhances Kupffer cell dependent portal pressure increase in fibrosis
C.J. Steib, C. Hartmann, C. von Hesler, J.M. Härtl, A.L. Gerbes (Munich, D)
32. Aminotransferase activity under abdominal sepsis: Multiple organ dysfunction syndrome
   L. Sydorchuk, P. Fomin, R. Sydorchuk, I. Sydorchuk, S. Levites, O. Polyansky,
   O. Khomko, O. Mikhailovsky, I. Bilyk (Chernivtsi, UKR)

33. Another vicious circle in acute hepatoenteral dysfunction syndrome: Relationship between gut microflora, antiendotoxin core antibodies (EndoCAb) and NO levels
   R. Sydorchuk, L. Sydorchuk, O. Kolomojets, M. Kolomojets, I. Sydorchuk, P. Knut
   (Chernivtsi, UKR)

34. Elevated serum cholesterol: A new marker for hepatic disorder and abdominal sepsis?
   R. Sydorchuk, P. Fomin, L. Sydorchuk, O. Sydorchuk, I. Sydorchuk (Chernivtsi, UKR)

35. Association analyses between variants in genes conferring diet-induced gallbladder contraction and bile salt-induced gallbladder relaxation and gallstone susceptibility in two distinct human populations
   U. Tennert, A. Tönjes, C. Ruffert, J. Mössner, F. Lammert, M. Stumvoll, P. Kovacs,
   H. Wittenburg (Leipzig, Homburg, D)

36. TIPS procedure does not change endotoxin levels in blood of patients with alcoholic liver cirrhosis
   J. Trebicka, S. Gansweid, B. Appenrodt, T. Sauerbruch, U. Spengler (Bonn, D)

37. Increased eNOS- and decreased Rho-kinase activity are associated with portal hypertensive gastropathy in human cirrhosis
   J. Trebicka, C. Wix, M. Hennenberg, M. Granzow, S. Klein, B. Appenrodt,
   J. Heller, T. Sauerbruch (Bonn, D)

38. Soluble TNFalpha-receptor p55 as prognostic marker in liver cirrhosis with portal hypertension and TIPS
   J. Trebicka, S. Gansweid, B. Appenrodt, T. Sauerbruch, U. Spengler (Bonn, D)

39. Does the chronic intermittent hypoxia link between obstructive sleep apnea and fatty liver disease?
   C. Turkay, D. Ozol, B. Kasapoglu, I. Kirbas, C. Koca (Ankara, TR)

40. Treatment with the non-peptide chemokine receptor 1 (CCR1) antagonist BX471 has no effect on fibrogenesis in a toxic model of liver fibrosis in mice
   S. Weber, R. Hall, I. Adrian, M. Mahler, C. Haskell, F. Lammert, F. Grünhage
   (Homburg, D; Berkely, USA)
List of Speakers, Moderators and Scientific Organizers

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Opening Hours:
Thursday, January 28, 2010 9.00 – 18.30 h
Friday, January 29, 2010 8.00 – 12.00 h

Congress Fees

The participation at the Falk Workshop is free of charge, however registration is mandatory.

Refreshments during coffee breaks on January 28 and 29, lunches on January 28 and 29, 2010, the dinner on January 28, 2010 and a copy of the abstract volume of the Workshop are also free of charge.

Admission to Scientific Events

For admission to scientific events your name badge should be clearly visible.
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