

Advanced postgraduate course in gastroenterology Zwolle and Amsterdam, the Netherlands, October 8–19, 2007

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I attended the postgraduate course in gastroenterology, which was held from October 8th till October 19th in Zwolle and Amsterdam in the Netherlands. The course has been organised by Doctor Frits Nelis from Zwolle and Professor Chris Mulder from the Free University Medical Center in Amsterdam every year since 1992. A total of 39 young gastroenterologists and surgeons from 5 Eastern European countries, South Africa and Iran participated in the course this year, including 6 young physicians from the Czech Republic. The idea of organising the course was born after Holland Gastroenterology Week, an international congress, held in 1989. The benefit from organising this congress has been financing The Holland Digestive Disease Week Foundation that finances these courses.

The Dutch Society of Gastroenterology was established in 1913 and has 1750 members at the moment, of whom more than 280 are gastroenterologists, 15 professors of gastroenterology and 8 gastroenterologists hold positions as heads of their departments.

There are 8 universities with university hospitals and many teaching hospitals in the Netherlands. Teaching hospitals organise practical clinical education for students during their last

2 years of medical education. The number of hospital beds in the Netherlands is 2.8 per 1 000 inhabitants and the total level of health care expenditure is 8.4 % of the national income. Specialist gastroenterology training takes 6 years, 2 years in internal medicine and 4 years in gastroenterology. Residents receive their training as medical specialists in either university hospitals or large teaching hospitals.

The first week of the course was held in Isala Hospital (Isala Klinieken) in Zwolle, the largest teaching hospital in the Netherlands, and was held under the supervision of Doctor Nelis, a gastroenterologist from the Isala Hospital. The chairman of the course was Marc van Blankenstein, former head of Department of gastroenterology in the Erasmus Medical Center in Rotterdam, the largest university hospital in the Netherlands. The course was divided into several sessions, each of which dealt with a specific problem of gastroenterology. During the first week, a total of 40 presentations were given by 33 Dutch gastroenterologists mostly from university centres, many of them European leaders in their field. The second week of the course was held at the Free University Medical Center in Amsterdam, and a total of 39 presentations

were given by 32 gastroenterologists, from both university and non-university hospitals.

The first day of the course was devoted to the urgent situations in gastroenterology. Frits Nelis talked about upper GI bleeding, which has remained the most common emergency situation in gastroenterology, with a stable mortality rate of 10–14 % during the last 50 years. Doctor Nelis pointed out that the number of NSAID induced bleeding ulcers has been increasing with increasing prescription of NSAID, mostly in developed countries. In more than 50 % of cases, the complication of an NSAID induced ulcer is the first sign of the presence of the NSAID ulcer. In the Netherlands, only 50 % of patients with one or more risk factors for the development of NSAID ulcers receive gastro-protection. Doctor Nelis mentioned that the major mortality risk factors in ulcer bleeding patients are the age > 60 years, major co-morbidity, ulcer > 2 cm in diameter, bleeding lesions Forrest Ia-IIb and re-bleeding. The risk of re-bleeding and mortality in patients with Forrest Ia-IIb lesions is 40–50 % and 0–23 %, respectively, and thereby those lesions have to be treated. Monique van Leerdam from the Erasmus Medical Center in Rotterdam summarised the

recent data on the treatment of upper GI bleeding. According to the results of the studies, addition of sclerosant to epinephrine injection has no benefit compared with epinephrine injection alone. The rate of re-bleeding decreases with an increase in the volume of the epinephrine injection and reaches 0 % with a volume of 35–45 mL [9]. Thermal methods (bi- and multi-polar coagulation) are as effective as epinephrine injection. Studies comparing haemo-clips with injection therapy showed inconclusive results. Doctor Leerdam mentioned, that according to the studies, additional endoscopic treatment modality (haemo-clips, thermal methods) after epinephrine injection reduces further bleeding, the need for surgery and mortality, and thereby, combination therapy should be considered in active bleeding ulcers (Forrest I) [2]. Doctor Leerdam also emphasised that proton pump inhibitors after endoscopic haemostasis reduce the re-bleeding rate, but have no impact on mortality [7]. She pointed out, that it is generally recommended retreating small re-bleeding ulcers in stable patients endoscopically and both ulcers > 2 cm in size and haemodynamically in stable patients should be treated surgically [6]. Elective surgery should be considered in patients with high risk of re-bleeding with ulcers on the posterior duodenal wall even after successful endoscopic treatment. Transcatheter arterial embolisation should be considered when accessible. She finally recommended that treatment of upper GI bleeding should be managed by a multidisciplinary team including an endoscopist, a surgeon, a radiologist and an anaesthesiologist. Doctor Geelkerken from the Medical University in Twente talked about acute splanchnic syndrome, which still has a mortality rate of more than 80 % if diagnosed at a late stage, but 0–50 % if diagnosed early. Older patients and patients with non-occlusive mesenterial ischaemia



Czech participants in this year's postgraduate course. Back row from the left: Jan Gregar (Palacky University Teaching Hospital, Olomouc), Kateřina Veselá (Central Military Hospital, Praha), Viktor Komárek (First Faculty of Medicine, Charles University, Praha); front row from left: Martin Kliment (Hospital Vítkovice, Ostrava-Vítkovice), Jan Petrášek (Institute of Experimental and Clinical Medicine, Praha) and Radek Kroupa (Masaryk University Teaching Hospital, Brno).

have worse prognosis than younger patients and patients with thrombosis and embolism. Intestinal fatty binding protein might be a promising serum marker for diagnosing acute splanchnic syndrome at early stages in the future. Continuous gastrojejunal tonometry, measuring tissue CO₂, might also be promising for monitoring splanchnic circulation, but still remains experimental. The optimum approach to a patient with high clinical suspicion on acute splanchnic syndrome is no delayed angiography with potential endovascular therapy and laparotomy with resection of non-viable bowel. Doctor Kolkman from Twente talked about chronic splanchnic disease which is symptomatic and should be treated when at least two vessels are included. Treatment of single vessel stenosis is still controversial, but according to their experience, gastric tonometry together with typical history of abdominal pain might help in selecting the candidates for intervention. Patients with suspected multivessel disease with imminent mesenterial infarction should be sent to centres for an immediate start of treatment preferably with endovascular intervention. Ischaemic colitis is

mostly non-occlusive and usually occurs in patients with low circulatory blood volume and after abdominal aortic surgery. The clinical and colonoscopic incidence in patients after acute abdominal aortic surgery is reported to be 10–20 % and up to 60 %, respectively. Angiography is generally not recommended in left sided ischaemic colitis, unlike in right sided, which is usually caused by the occlusion of superior mesenteric artery. The mortality rate in right sided ischaemic colitis is 23 % compared with 12 % in left sided [10]. Doctor Visser from Leiden University presented the latest data on antibiotic prophylaxis and treatment in acute pancreatitis, which are still not clear because of inconsistencies in the studies. A randomised placebo controlled study, published by Dellinger recently, did not demonstrate any significant difference in the occurrence of pancreatic or peripancreatic infection, mortality, or requirement for surgical treatment between meropenem and placebo groups in patients with severe acute pancreatitis [3]. Based on the results of this study, Doctor Visser recommended the treatment on demand, which is, according to



Students concentrating on the topic.



Doctor Frits Nells (left) and Professor Chris Mulder (right) during discussion with auditorium.

him, not worse than early prophylaxis and should be based on the confirmation of infected necrosis after fine needle aspiration. According to Doctor Bleichrodt from St Radboud University Medical Center in Nijmegen, surgery in acute pancreatitis is indicated, when proven infected necrosis, septic complications resulting from pancreatic infection, abdominal compartment syndrome and late complications occur. The optimal approach is to delay surgery as long as possible and if necessary, surgery should be minimally invasive. Surgery within 14 days after the onset of symptoms is generally not recommended [11].

The subject of the second day of the course was oesophageal cancer.

Marc van Blankenstein from the Erasmus Medical Center in Rotterdam presented the epidemiology of oesophageal cancer in the Netherlands and pointed out that adenocarcinoma of the oesophagus incidence rates rose more rapidly in males (+ 7.2 % a year), than in elderly females (+ 3.5 % a year), who may have been protected by their higher NSAID consumption. Conversely, the adenocarcinoma of gastric cardia incidence rates declined. This study showed, that the proposed protective effect of *Helicobacter pylori* (\pm CagA) was contradicted by the absence of any relationship between the widely diverging adenocarcinoma of the oesophagus incidence rates in four regions of the

Netherlands with identical prevalence of *Helicobacter pylori* infection [1]. Els Verschuur from the Erasmus Medical Center presented the optimal palliative management of patients with oesophageal cancer. The SIREC study, the Dutch randomised controlled study comparing SEMS placement with brachytherapy in palliative treatment of patients with inoperable oesophageal or gastro-oesophageal junction cancer, showed that HDR brachytherapy gave a better long term relief of dysphagia and better long term quality of life with fewer complications than stent placement with comparable costs [4]. She finally recommended that stents should be placed, if expected survival was \leq 3 months and brachytherapy, if expected survival was $>$ 3 months. If dysphagia persists after brachytherapy, stent placement is recommended. Wouter Curvers from the Academic Medical Center in Amsterdam talked about endoscopic mucosal resection of Barrett's oesophagus, which may be performed if unifocal mucosal lesion $<$ 2 cm, without local lymph nodes involvement on EUS is diagnosed. According to the experts from the AMC, this procedure requires three-modality imaging, including high resolution endoscopy, video-autofluorescence imaging and narrow band imaging to identify the lesion properly. EMR technique may require additional ablation of the whole Barrett's mucosa using one of the ablative techniques – argon plasma coagulation, photodynamic therapy, multiband mucosectomy, or radiofrequency ablation. Doctor Henegouwen, a surgeon from Amsterdam, talked about surgery in oesophageal cancer. A randomised HIVEX study conducted in Amsterdam and Rotterdam showed no difference in mortality of patients with oesophageal or cardia cancer undergoing either transhiatal or transthoracic oesophageal resection with wide local excision and two field lymphadenectomy in the latter. No signifi-

cant difference in 5-years survival was observed between both groups, but the tendency for better long term survival was observed in transthoracic oesophageal resection group [5]. Doctor de Knecht from the Erasmus Medical Center presented the current treatment modalities in chronic hepatitis C. He also mentioned multiple new agents that are being developed, which target various stages of the HCV life cycle. He emphasised that inhibitors of posttranslational processing Telaprevir and Boceprevir appear to be the most promising agents. Doctor Ponsioen from Amsterdam talked about autoimmune cholestatic disorders and reminded us that autoimmune pancreatitis is always associated with sclerosing cholangitis and is thereby called autoimmune cholangiopancreatitis or sclerosing cholangitis with autoimmune pancreatitis. Autoimmune cholangiopancreatitis is very rare disease with only 40 patients in the whole of the Netherlands. Unlike primary sclerosing cholangitis, autoimmune cholangiopancreatitis is characterised by the age of > 60 years at onset, obstructive jaundice at presentation, no association with inflammatory bowel disease, high serum IgG₄ level and dramatic response to corticosteroid treatment [8]. Henk van Buuren from the Erasmus Medical Center talked about the Baveno IV consensus on the treatment of oesophageal varices. According to him, acute variceal bleeding should be treated with triple therapy including endoscopic, pharmacologic treatment with vasoactive drugs and intravenous antibiotics, both preferably starting before endoscopy. Band ligation is the first choice of endoscopic treatment, followed by sclerotherapy when band ligation is technically unsuccessful. In case of failure of combined endoscopic and vasoactive treatment TIPS should be considered. Frits Nelis talked about the clinical aspects of hereditary and familial

colorectal cancer. In the Netherlands, microsatellite instability analysis is performed by a pathologist if colorectal cancer or high grade dysplasia adenoma occurs at the age of < 50 or < 40 years respectively, or if ≥ 2 colorectal cancers or 1 colorectal cancer and ≥ 1 hereditary non-polyposis colorectal cancer – associated tumour occurs.

Several aspects of inflammatory bowel disease were discussed during the course. Bas Oldenburg from the University Medical Center in Utrecht talked about thromboembolic complications in inflammatory bowel disease, which have the prevalence 1–7 % in clinical and 7–39 % in autopsy studies. Doctor Oldenburg emphasised that the prevention of thromboembolic events should be performed in these patients by avoiding procoagulant agents, smoking and oral contraceptives, minimizing embolisation, vessel injury, reducing hyperhomocysteinaemia by folate, vitamin B₆ and B₁₂ supplementation. Heparin treatment should be considered in regard to the degree of immobility, history of thrombosis and disease activity. Ton Naber from Nijmegen University discussed the nutritional aspects of treatment in inflammatory bowel disease. According to him, total parenteral nutrition is not relevant for

inflammation in ulcerative colitis, but tube feeding with enteral nutrition may induce remission in Crohn's disease. Fish oil may reduce the chance of relapse in Crohn's disease and butyrate may induce remission in distal ulcerative colitis. Dirk de Jong presented actual recommendation on the conventional treatment in inflammatory bowel disease. He emphasised, that 5-aminosalicylates are proven to be effective in induction and maintenance treatment in ulcerative colitis, but ineffective in maintenance treatment in Crohn's disease. In Crohn's disease, budesonide and prednisolone are equally effective in induction of remission, but ineffective in the maintenance treatment. Thiopurines are proven to be effective for induction and maintenance in Crohn's disease and maintenance treatment in ulcerative colitis. Gerard Dijkstra from Groningen University talked about small bowel transplantation, indication of which is permanent intestinal failure with the failure of total parenteral nutrition. Histological recurrence of Crohn's disease can occur early after transplantation in small intestinal allografts and necessitates aggressive therapy to prevent allograft loss. Doctor Dijkstra also talked about biological therapy in inflammatory bowel disease and bone marrow



Professor Chris Mulder (left) and Doctor Frits Nelis (right) always in a good mood.



Doctor Frits Nelis discussing with auditorium.

transplantation, the latter still an experimental therapeutical option in patients with severe Crohn's disease who fail on standard treatment.

Doctor Nederveen Cappel from Leiden University pointed out that 5–10 % of pancreatic cancer is hereditary and consist of hereditary chronic pancreatitis, Peutz-Jeghers syndrome, site specific pancreatic cancer (pancreatic cancer without association with any other malignancy in families with ≥ 2 members affected), familial atypical multiple mole melanoma, and familial breast cancer. Several imaging methods are used in surveillance program such as MRI, CT, EUS, EUS-FNA and ERCP.

Professor Chris Mulder from the Free University in Amsterdam talked about diagnosing and treatment of coeliac disease. He pointed out that this disease is presented not only in young patients with significant weight loss, but 20 % of patients are > 60 years old at the time of diagnosis and most of them have already developed severe osteoporosis. A total of 40 % of patients with coeliac disease are overweight. Studies have shown that majority of endomysial antibody positive Marsh 0 patients progressed

to Marsh IIIA/IIIB without gluten-free diet during the years. Therefore, professor Mulder recommended, that those patients should be treated with a gluten-free diet. He mentioned finally, that bone marrow transplantation has been promising in the treatment of patients with enteropathy associated T lymphoma.

Finally, I would like to thank the organisers, doctor Frits Nelis and professor Chris Mulder, for continuing to organise these courses, which are not only good chance to gain new knowledge in gastroenterology, but also a good way to meet new people from abroad, make new friends and gain awareness of different cultures.

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