

sorafenib, (pancreatic or hepatocellular carcinoma), reported by others, have indicated suppression of disease progression and increased survival times. Reasons for the different results are unknown but highlight the need for more studies.

Conclusions: A convincing biologic rationale for using antiangiogenic drugs to treat *early* stage microscopic metastatic disease has yet to be established. More intensive preclinical efforts to model adjuvant therapy (and compare the results to those obtained in metastatic models) in different disease indications are urgently needed, not just for antiangiogenic drugs but other therapeutic modalities as well.

References

Ebos & Kerbel "Antiangiogenic therapy: impact on invasion, disease progression, and metastasis." *Nat Rev Clin Oncol.* 8: 210–221, 2011.

76

INVITED

Biomarkers & Angiogenesis

Abstract not received

Scientific Symposium (Sat, 24 Sep, 16:00–18:00) Probiotics, Calories and Cancer Care

77

INVITED

Probiotics and Colon Cancer Prevention

J. Rafter¹. ¹Karolinska Institutet, Department of Biosciences and Nutrition, Huddinge, Sweden

While a myriad of healthful effects have been attributed to probiotic bacteria, a controversial one is that of anticancer activity. Reports in the literature, regarding the anti-coloncancer effects of lactic acid bacteria, fall into the following categories: *in vitro* studies and *in vivo* studies in laboratory animals; dietary intervention studies in human volunteers and epidemiological studies correlating colon cancer and certain dietary regimes. It must be emphasised that, to date, there is no direct experimental evidence for colon cancer suppression in humans as a result of consumption of lactic cultures in fermented or unfermented dairy products. However, there is a wealth of indirect evidence, based largely on laboratory studies, in the literature and this will be summarized in my presentation. At present, the results from the epidemiological studies do not appear to support the results from experimental studies. The reason for this is unclear but might be explained by differences in bacterial strains, with the strains being used in the experimental studies surviving better in the gastrointestinal tract than the strains present in fermented dairy products. It should also be emphasized that great care must be exercised in extrapolating the results of *in vitro* and animal studies to the human system. It must also be pointed out that the precise mechanisms by which probiotic bacteria may inhibit colon cancer are presently unknown and these will be discussed. However, even with these reservations in mind, the use of lactic cultures for human colon cancer suppression holds promise and deserves more scrutiny. The latter should involve carefully designed human dietary intervention studies to corroborate the wealth of experimental studies. I will report on such an intervention study that was recently completed as part of an EU funded project "Synbiotics and Cancer Prevention in Humans".

78

INVITED

Assessment and Management of Gastrointestinal Symptoms After Cancer Treatments

J. Andreyev¹. ¹Royal Marsden Hospital, Department of Oncology, London, United Kingdom

Background: Chronic GI symptoms significantly impacting on quality of life after cancer therapy, affect more people annually than are diagnosed with Ulcerative Colitis and Crohn's disease together. Yet, whilst almost every hospital has one or more specialists in Inflammatory Bowel Disease, few patients with treatment related GI symptoms are referred to a gastroenterologist. When they do, most meet a professional who is not trained to manage their symptoms. As a result ineffective or dangerous treatments are frequently prescribed.

Results: The current priority of follow up after cancer is to detect disease recurrence. Patients will therefore often not tell their oncologists about symptoms if they do not feel they are due to cancer. Patients frequently believe that symptoms after treatment are inevitable, that little can be done and are embarrassed to seek help. Robust strategies to detect patients who need help are urgently required and every unit must develop reliable referral pathways to gastroenterologists who in turn need training to manage post treatment symptoms optimally.

The gastrointestinal tract is only able to respond to physical insults in a limited number of ways. Identical symptoms can arise from many different causes. The majority of patients with new onset gastrointestinal symptoms will have more than one cause for symptoms, surprisingly often not even related to their previous cancer therapy. Empirical treatment often fails to anticipate the true cause of symptoms and for this reason may be ineffective. A systematic, logical, physiological investigative approach will frequently allow straightforward, helpful and sometimes curative treatments to be prescribed.

Conclusions: It is no longer acceptable to ignore the GI morbidity of cancer therapies, which is the current norm for the vast majority of patients. A completely new approach to the management of chronic GI side effects of cancer treatment is required. Large numbers of patients are affected. Most patients can be helped or cured. Some problems are preventable.

79

INVITED

Continence Interventions – Bowel Problems

C. Taylor¹. ¹Kings College, Macmillan Education Unit, London, United Kingdom

There is increasing evidence to indicate that cancer survivors have concerns and physical problems which are not being adequately addressed. One of the main difficulties which individuals diagnosed with colorectal cancer treatment can experience is an alteration in their bowel function. In particular, it is known that the majority of those recovering from rectal cancer surgery will have to cope with undesirable bowel symptoms; urgency, frequency, stool fragmentation and/or incomplete bowel emptying plus changes in levels of continence. Bowel continence embraces the ability to control flatus, liquid and stool.

This presentation will consider the particular effects for individuals suffering from anterior resection syndrome who following a low rectal resection may for example manage to remain continent to stool but when unable to control the release of flatus in public, feel acutely embarrassed. Another patient with this condition may manage to control their stool by day but then experience an urgent need to defecate at night which if not responded to in time may 'cause an accident to happen'. These bowel symptoms can be particularly problematic post stoma reversal and also for those post multimodal treatment i.e. after receiving a combination of chemotherapy, radiotherapy and surgery. These symptoms have to date not been well articulated.

These symptoms may persist for a few weeks to months and although for many there will be improvement over time, there is unlikely to be a return to the same function relied upon pre-treatment. It seems that despite the potential for such symptoms to adversely affect quality of life, many individuals do not receive the help they need to manage them. It is suggested that without appropriate intervention these symptoms can become a late treatment effect which then impact on other health domains and disrupt normal daily functioning.

At present in the UK the nature of bowel assessment and frequency of monitoring during the follow-up period is subject to local service delivery models and variation exists. A more systematic approach to bowel assessment and management following such treatment is advocated. There is clear benefit in early intervention (Camelleri-Brennan 2002) but it is often not sought or offered. Work is underway within the National Cancer Survivorship Initiative within the UK to improve the after-care these patients receive, testing new models of assessment, integrating improved care planning and information exchange between care providers and the patient at the end of treatment. In line with these developments, this presentation will indicate ways we can ameliorate bowel continence problems, in order to enhance their cancer survivorship experience.

80

INVITED

The Experience of Living With a PEG

L. Martin¹. ¹Karolinska Institutet, Upper Gastrointestinal Research Department of Molecular Medicine and Surgery, Stockholm, Sweden

Previous research has shown that appropriate nutritional interventions reduce the risk of surgical complications (Bozzetti, 2001) shorten the recovery time and the length of hospital stay (Pirlich, 2006), improves tolerance to treatment (Braga, 2002) and increase the chance of survival (Stratton, 2007). This improved awareness of the relevance of nutrition support in the treatment of diseases has contributed to a rapid increase in the use of percutaneous endoscopic gastrostomies (PEG) worldwide (NCEPOD, 2004, Gauderer, 2002).

For patients with preserved intestinal function but with inadequate or no independent oral food intake, enteral nutrition therapy with PEG is one of the preferred alternatives (Kurien, 2010, ESPEN guidelines, NICE guidelines) to nutrition support. The PEG is discrete and does not interfere with speech or swallowing (Gomes, 2010) but the social role with a meal