J Gastrointest Dig Syst 2016, 6:8(Suppl)
http://dx.doi.org/10.4172/2161-069X.C1.047

Histopathological examination of quality of total mesorectal excision (TME): Single institution results

Anna Sergeevna Artemyeva, Ivko Olga, Alexey Karachun and **Petrova Elena**
N N Petrov Research Institute of Oncology, Russia

Total mesorectal excision (TME) has become the contemporary standard of treatment for patients with rectal cancer. The multidisciplinary approach to colorectal cancer ensures appropriate treatment for each patient with rectal cancer. Pathologists play an important role in the evaluation of these specimens, including the quality assurance of surgical performance and evaluation of the circumferential radial margin (CRM). The most significant predictor of local recurrence and quality of the excised mesorectum is another important factor in assessing the risk of local recurrence in patients with a negative CRM. Proper pathological assessment of the TME specimen provides important prognostic information, as well as critical feedback to surgeons regarding technical performance. So, high quality histopathological reporting is necessary in the management of rectal cancer. In 2014, we began to perform pathological reports of rectal cancer according to guidelines of Royal College of Pathologists. Our reports conclude points such as site of the tumor, diameter of the tumor, distance of tumor to resection margin, histological type, degree of differentiation, TNM staging, total number of lymph nodes, isolated apical lymph node metastasis, presence/absence of lymph node metastasis, depth of invasion, neural invasion within tumor, vascular or lymphatic invasion within tumor, resection margin, presence/absence of perforation, involvement of circumferential margin, relationship of tumor to peritoneal reflection and effects of neoadjuvant therapy. Routine pathological report should be adequate and it remains the main arbiter of management, prognosis, surgical quality assessment and gives us an opportunity to compare the results.

oinochoya@gmail.com

From pharmacogenomics to surgigenomics: Is it the new frontier for determining ultimate procedure in bariatric/metabolic surgery?

Halit Eren Taskin
Istanbul University, Turkey

Obesity is the second leading cause of death and it considerably increases the risk of other co-morbidities such as metabolic syndrome, cardiovascular diseases, type-2 Diabetes Mellitus (T2DM), non-alcoholic steatohepatitis, dyslipidemia, sleep apnea and infertility. For the last quarter decade, bariatric-metabolic surgery has justified its role for treating this multi-factorial disorder with substantial resolution of above-mentioned co-morbidities. Here-in, we will discuss recent data on proteomics, metabolomics and transcriptomic associated with bariatric/metabolic surgery and we will concentrate on a new terminology which covers all this omics research and personalized therapy options before and after bariatric/metabolic and other surgeries named as surgigenomics. Surgigenomics is a new terminology and differs from pharmacogenomics in certain aspects. It is the study of the role of genetics to surgical response in effect of time. There is no drug response or alteration of protein or nuleotide synthesis due to the chemotherapy. The whole effect to genome is being done by the alteration of anatomy and hormonal response of the body as a result of surgical procedure. Surgigenomics is important for personalized therapy because of the following reasons: Like every other drug there are different surgical options for the treatment of morbid obesity and T2DM. These options vary substantially due to patients' weight and metabolic state. If patients can be screened by whole genome sequencing before surgery, more focused surgical option can be determined for the vulnerable individual and this option can be more durable in future for controlling the metabolic state of the individual. Also recent studies done in pre and post bariatric surgery; patients involving in transcriptomics has led promising results for targeted drug therapy leading many data on expression of several genes involved in inflammation, insulin sensitivity in muscle, adipose tissue and hematopoietic stem cells. The discoveries from these RCTs encouraged us to open up a new field of surgigenomics and gave us hope for future personalized options of metabolic-bariatric surgery which may lead to targeted drug therapy in obesity and metabolic disorders.

eren_taskin@hotmail.com