line of treatment with a TKI (sunitinib, pazopanib, axitinib, or sorafenib) and/or mTOR inhibitors (everolimus or temsirolimus) (1012-3 February 2014) were identified by IC9D code. Descriptive statistics were used to evaluate patterns of care in the overall sample. Univariate analysis was conducted to compare individual treatments. Multivariate analysis controlling for covariates will be reported in an upcoming study. The mean duration of TKI and mTOR inhibitors than is published in clinical trials (range 4-8 months). Study results suggest an unmet treatment need for RCC despite the rapid expansion of the number of drugs with an RCC indication in the past 5 years.

PCN21 OVERALL SURVIVAL (OS) AND QUALITY OF LIFE (QOL) IN PATIENTS WITH METASTATIC GLIOBLASTOMA MULTIFORME (GBM): A SYSTEMATIC LITERATURE REVIEW

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OBJECTIVES: Approved treatment options for patients with recurrent GBM yield limited survival and QoL benefits. A systematic review was conducted to summarize OS, QoL, and NF among patients with recurrent GBM. METHODS: Eligible English language publications (2005–2014) were identified using Ovid-MEDLINE, and the Cochrane Library. RESULTS: Fifty publications were identified. Among bevacizumab-naive patients treated with monotherapies, median OS ranged from 4.9 months with initial bevacizumab treatment, 6.6-9.4 months for targeted therapies (enzastaurin, cediranib, and sunitinib), 7.1-11.7 months with chemotherapies (lomustine, velurubin, and temozolomide), and 10.9-11.4 months with mTOR inhibitors (everolimus and temsirolimus). Among those treated with combination therapies, median OS ranged from 8.7-16.0 months with bevacizumab + chemotherapy, 5.6 months with bevacizumab + sorafenib, and 9.4 months with cediranib + lomustine. Among patients with prior bevacizumab treatment, median OS ranged from 3.4-3.6 months with nilotinib. The study criteria were not specifically reporting outcomes for bevacizumab-naive or -experienced patients, median OS ranged from 4.4 months with temsirolimus to 24.5 months with fumarate. Factors that paralleled longer OS included male sex, younger age, fewer prior therapies, faster brain tissue distraction on imaging, longer time to recurrence, smaller tumor volume, better performance status, and methylated O6-methylguanine-DNA methyltransferase (MGMT) promoter methylation status. Eighty studies assessed the humanistic burden on patients. Baseline QoL and NF among these patients were worse compared with both the general population and patients with other cancers. No studies reported treatment-related improvements in QoL or NF. CONCLUSIONS: Currently the study criteria for recurrent GBM are associated with limited OS duration and a lack of improvements in QoL or NF. Among bevacizumab-naive patients, initiation of bevacizumab or other mono- or combination therapies resulted in median OS less than 1.4 years, indicating a consistent unmet need in this population.

PCN22 COMPARATIVE EFFICACY OF IMATINIB, DASATINIB AND NILOTINIB FOR NEWLY DIAGNOSED CHRONIC MYELOID LEUKEMIA IN CHRONIC PHASE (CML-CP): A META-ANALYSIS AND INDIRECT COMPARISON

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OBJECTIVES: Initial treatment of chronic myeloid leukemia in chronic phase (CML-CP) is very important and tyrosine kinase inhibitors (TKIs) are effective to delay the progression of chronic phase in accelerated and blastic phase. Dasatinib and nilotinib have been compared to imatinib as first line treatments for CML in two recent randomized studies. However, no head to head evidence exists of the relative efficacy of dasatinib and nilotinib. The purpose of this study is to compare the clinical effects between the three targeted agents in CML patients. METHODS: We conducted a systematic review and used the data extracted to perform an indirect comparison meta-analysis of the three interventions. A random-effects approach was used to estimate the probability of response at each time point, and indirect comparison was implemented in the WinBUGS software package. RESULTS: Data from nine clinical studies (3 trials) were included. The risk ratio of complete cytogenetic response (CCyR) and major molecular response (MRM) for dasatinib and nilotinib were significantly better than imatinib (CCyR and MMR at 6 months: 1.24 to 1.49 and 2.75 to 3.35, CCyR and MMR at 12 months: 1.18 to 1.23 and 1.50 to 1.99). A result of comparing the three TKIs of CCyR or MMR at 12 and 24 months follow-up through Bayesian indirect comparison showed that nilotinib is the treatment showed a better response than the dasatinib (dasatinib vs nilotinib at 24 months CCyR (95%CrI): 0.798 (0.300-0.986) vs. 0.844 (0.382-0.990); dasatinib vs nilotinib at 24 months MMR (95%CrI): 0.604 (0.112-0.950) vs. 0.683 (0.173-0.970)). The current study did not find significant differences compared to the imatinib. CONCLUSIONS: On the basis of a systematic review of the current literature base, dasatinib and nilotinib should be viewed as dominant compared to imatinib. However, further clinical studies directly comparing nilotinib and dasatinib are required for more accurate comparisons between the three TKIs.

PCN23 EFFECTS OF LIFESTYLE INTERVENTIONS ON BODY MASS INDEX IN BREAST CANCER PATIENTS

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OBJECTIVES: Obesity is associated with an increased risk of breast cancer, and is linked with a more aggressive tumor and a higher probability of having positive axillary lymph nodes and faster growing tumors. It has been suggested that up to 50% of postmenopausal breast cancers are attributable to obesity. Accordingly, this study assessed the impact of lifestyle intervention on body mass index (BMI) in women with breast cancer. This is a randomized clinical trial study. The study samples were 80 women with stage I, II, or III breast cancer, that operated for breast cancer and their chemotherapy or radiation therapy completed 3-18 months ago. They are divided into a control group and lifestyle intervention group. Those in the lifestyle intervention group were instructed to practice aerobic exercises 45-60 minutes three times per week for 24 weeks with dietary energy restriction training. Those in the control group were instructed to continue their regular activities and their routine health care. Data were obtained from the patient information form and body mass index form that completed before and after the lifestyle intervention in both groups. RESULTS: No baseline differences existed between the two groups for the mean of BMI (p = 0.366). In the study but the mean of BMI in the lifestyle intervention group after the intervention decreased to 25.12 ± 2.86, while in the control group it increased to 30.42 ± 6.89. The difference between the mean of BMI among the two groups after the intervention was statistically significant (p = 0.004). CONCLUSIONS: The lifestyle intervention could be considered as part of a cancer survivorship program. For women with breast cancer, lifestyle intervention can decrease body mass index. Additional research in lifestyle intervention along with cognitive behavioral therapy also may be beneficial.

PCN24 CONCEPTUAL EFFECTIVENESS AND SAFETY OF ROBOT-ASSISTED LAPAROSCOPIC HYSTEREC TONY VERSUS TRADITIONAL LAPAROTOMY FOR ENDOMETRIAL CANCER: A SYSTEMATIC REVIEW

Park D

OBJECTIVES: Minimally invasive hysterectomy using the Da Vinci robot-assisted surgical system remains uncertain if the technology offers benefits compared with conventional approaches. The purpose of this study was to compare the outcomes of robot-assisted laparoscopic hysterectomy (RALH) compared with traditional laparotomy in endometrial cancer. METHODS: We searched potentially relevant studies using Ovid-Medline, Ovid-EMBASE, Cochrane library, and 5 local medical databases through July 2014. We included randomized, non-randomized studies, post-operative complications and specific morbidities for safety outcomes, survival, recurrence, length of stay (LOS), estimated blood loss (EBL), operative time (OT) for effectiveness outcomes. Two independent reviewers extracted data and assessed the risk of bias for non-randomized studies. RESULTS: 19 eligible comparative studies representing 3,062 patients were identified. Overall and disease-free survival didn’t result in significant difference for 1 study. Fooled mean difference for resected total lymph node (TN) showed no significant difference (WMD 1.59, 95% CI -1.64-4.83, I2=90%, WMD -1.64, 95% CI -4.21-0.94, I2=91%, WMD 0.96, 95% CI -1.30-3.23, I2=93%, respectively). LOS and OT was shorter for RALH (WMD -2.85, 95% CI -3.28, -2.41, I2=91%, WMD 44.15, 95% CI 20.91, 67.39, I2=88%, respectively). EBL was significantly reduced in RALH group (WMD -159.62, 95% CI -189.73, -129.50, I2=83%). Overall, intra-operative and post-operative complications (RR 0.37, 95% CI 0.28-0.49, I2=9%, RR 0.40, 95% CI 0.23-0.72, I2=0%, RR 0.49, 95% CI 0.36-0.68, I2=0%, respectively), infection, the incidence of other complications were no statistically significant differences. CONCLUSIONS: RALH may be a generally safer and better option than laparotomy in endometrial cancer. Robotic surgery is associated with shorter LOS, OT, lower EBL and fewer complications than laparotomy. Further prospective studies following term follow-up are required.