OBJECTIVES: This is a retrospective cohort study examining the development of prolonged neutropenia as a result of the induction chemotherapy R-CHOP/CHOP in diffuse large B-cell lymphoma (DLBCL) patients. It aims to 1) identify the incidence and predictive factors of the prolonged neutropenia, and 2) evaluate the infection complications and clinical outcomes of prolonged neutropenia in this patient group.

METHODS: Medical records of 43 DLBCL patients who received R-CHOP/CHOP induction between the year 2009 and 2010 at Prince of Wales Hospital (PWH) were reviewed. Information including basic demographic information, disease-related characteristics, and laboratory values were recorded. Incidence of prolonged neutropenia, duration of neutropenic episodes, and infection complications were also collected. Correlations between predictive/risk factors and the occurrence of prolonged neutropenia were examined using univariate analysis and multivariate logistic regression analysis.

RESULTS: Inpatient status (OR: 12.000, p-value = 0.006), Ann Arbor stage III or IV (OR: 3.886, p-value = 0.020) and defined National Prognostic Index (NPI) high risk (OR: 0.049, p-value = 0.002) were identified as predictive factors of prolonged neutropenia. Prolonged neutropenia has been shown to cause significant longer duration of hospitalization, increased ICU admission, dose reduction and delay in chemotherapy or early termination of treatment. The use of prophylactic G-CSF and/or antibiotics has also been shown to reduce the occurrence of prolonged neutropenia.

CONCLUSIONS: Several predictive factors were demonstrated to have association with the occurrence of prolonged neutropenia in DLBCL patients after receiving R-CHOP/CHOP. Preventive measures, including prophylactic G-CSF and/or antibiotics, should be considered as part of the treatment for the patients at risk.

PCN9
ADVERSE EVENTS AMONG PATIENTS WITH METASTATIC COLORECTAL CANCER TREATED WITH MONONCLONAL ANTIBODIES IN CLINICAL PRACTICE
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OBJECTIVES: The monoclonal antibodies (mAbs) bevacizumab (Bmab), cetuximab (Cmab), and panitumumab (Pmab) have been indicated for the treatment of patients with metastatic colorectal cancer (mCRC). The objective of this study was to describe the incidence of adverse events (AEs) among patients with mCRC treated in clinical practice.

METHODS: Medical chart review was conducted for patients treated at three US cancer centers from January 2004 to March 2009. Qualifying cases were adults with: a diagnosis of colorectal cancer AND evidence of metastasis AND treated with mAbs. The incidence of AEs was reported across all patients and with each specific mAb. RESULTS: Among 103 patients with mCRC, 54 experienced 139 AEs that met study criteria. The overall study sample was predominately Caucasian (99%), age range 57.6 years, 51.5% female, and located in the Northeast (28.2%) and Midwest (70.9%). The majority of patients (87%) were on chemotherapy. Grade 3/4 AEs that occurred with a frequency ≥5% were: rash (24%) (Bmab 11%, Cmab 33%, Pmab 25%), diarrhea (18%) (Bmab 14%, Cmab 17%, Pmab 15%), neutropenia (15%) (11% for Bmab and Cmab, 0% for Pmab), vomiting/nausea (8%) (Bmab 5%, Cmab 7%, Pmab 5%), infusion reaction (8%) (Bmab 3%, Cmab 13%, Pmab 0%), and venous thrombosis (7%) (8% for Bmab, 0% for Cmab and Pmab).

CONCLUSIONS: In this study of patients treated in community practice, the incidences of AEs with mAbs therapies in patients with mCRC had similar incidence found in the randomized controlled trials (RCTs). The final determination could be confounded by differences in time on therapy among mAbs. Additional research with larger sample sizes is needed to more thoroughly examine these AEs in clinical practice.

PCN10
COMORBID CARDIOVASCULAR DISEASES IN PATIENTS WITH METASTATIC COLORECTAL CANCER
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CONCLUSION: Cardiovascular events are common in patients with metastatic colorectal cancer (mCRC) treated with chemotherapy. The patients in this study had a high prevalence of cardiovascular comorbidities. This highlights the importance of addressing cardiovascular risk in the treatment of mCRC patients.

REFERENCES:

PCN11
BEVACIZUMAB IN COMBINATION WITH CHEMOTHERAPY FOR THE FIRST-LINE TREATMENT OF METASTATIC COLORECTAL CANCER
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OBJECTIVES: To assess the efficacy of bevacizumab plus chemotherapy compared with chemotherapy alone in previously untreated metastatic colorectal cancer (mCRC) patients, who are appropriated for intensive therapy.

METHODS: A systematic review of the literature was conducted for this review were: health technology agencies reports, meta-analysis, systematic reviews and randomized controlled trials (RCTs), in mCRC comparing chemotherapy plus bevacizumab with chemotherapy alone. Searches were realized in MEDLINE, EMBASE, the Cochrane Library, and CRD databases until the 8th of June 2011. The end points evaluated were overall survival (OS), progression-free survival (PFS), overall tumour response rate (RR), and quality of life (HRQoL).

RESULTS: Two RCTs comparing chemotherapy plus bevacizumab with chemotherapy alone for first-line treatment of mCRC were included in the efficacy assessment. The chemotherapy in one of these trials was the FOLFOX-4 regimen and in the other the XELOX regimen utilising BEV. The addition of bevacizumab to FOLFIRI showed an increase in terms of OS (Hazard Ratio (HR): 0.66, p<0.001), PFS (HR: 0.54, p<0.001), and RR. FOLFIRI is not current standard chemotherapy and it is not an adequate comparator. The addition of bevacizumab to XELOX/FOLFOX-4 resulted in statistically significant difference in terms of PFS (HR: 0.83, Confidence interval 97.5%: 0.72-0.95). The median OS was not statistically significant, and the RR was similar in both arms. No RCTs comparing bevacizumab with FOLIRI vs. FOLFIRI were found. None of the studies reported the impact of bevacizumab treatment on HRQoL.

CONCLUSIONS: The combination of bevacizumab with chemotherapy increases PFS in untreated patients with mCRC, but it is not current standard chemotherapy and it is not an adequate comparator. The addition of bevacizumab to XELOX/FOLFOX-4 showed a significant increase in terms of OS (HR: 0.66, p<0.001), PFS (HR: 0.54, p<0.001), and RR. FOLFIRI is not current standard chemotherapy and it is not an adequate comparator. The addition of bevacizumab to XELOX/FOLFOX-4 resulted in statistically significant difference in terms of PFS (HR: 0.83, Confidence interval 97.5%: 0.72-0.95). The median OS was not statistically significant, and the RR was similar in both arms. No RCTs comparing bevacizumab with FOLIRI vs. FOLFIRI were found. None of the studies reported the impact of bevacizumab treatment on HRQoL.