How Office Based Gyneco-Oncologists in Germany Apply Antiemetic Guidelines in AC-Containing (Neo)Adjuvant Chemotherapy for Breast Cancer

Jörg Schilling[1] for the German Professional Association of Gyneco-Oncology in Practices (BNGO), Hans-Joachim Hindenburg[2]

[1]BNGO e.V., Neuenhagen b. Berlin, [2]Practice for Gyneco-Oncology, Berlin

Introduction

Guidelines for supportive care in oncology are an important instrument to secure treatment quality and to maintain the quality of life of cancer patients. Despite their broad availability and high level of awareness however, there are considerable limitations to the application of antiemetic guidelines. Similarily, doctors may not always be aware of changes in the guidelines. Thus, the implementation of guideline changes may be delayed. The German Professional Association of Gyneco-Oncology in Practices (BNGO) is dedicated to quality-assured out-patient treatment of patients with gynecologic tumors. Therefore, we conducted this survey on the awareness and practical usage of antiemetic guidelines in BNGO practices of Gyneco-Oncology. In total, 49 practices took part in the survey.

Objectives

Goal of this survey was to obtain information on the awareness of different national and international antiemetic guidelines and to evaluate their application in practices of Gyneco-Oncology in breast cancer patients that receive adjuvant or neoadjuvant chemotherapy with an anthracycline (adriamycin = A, or epirubicin = E) and cyclophosphamide (C).

Background

The 2011 updated guidelines of the American Society of Clinical Oncology (ASCO) [Basch E et al. J Clin Oncol 2011;29(31):4189-98] classified the combination of anthracyclines and cyclophopsphamide as highly emetogenic chemotherapy (HEC), although single-agent anthracyclines as well as single-agent cyclophosphamide have only a moderate emetogenic risk. These regimens are frequently used as adjuvant and neoadjuvant chemotherapy in breast cancer. Younger age and female gender of the patients are considered additional risk factors for nausea and vomiting during chemotherapy, which has contributed to the change of the guideline.

Materials and methods

From October 2012 until August 2013, demographic data as well as data on real life antiemetic therapy have been recorded in 49 German Gyneco-Oncology practices using the specific ODM Quasi® GYN System. 250 breast cancer patients with a median age of 58 years who received cycle 1 and 3 of AC or EC containing adjuvant (80% of patients) or neoadjuvant (20% of patients) chemotherapy were documented. Antiemetic treatment in the first and third chemotherapy cycle was documented in 246 patients. The documentation involves demographic data of patients and a questionaire about doctors' knowledge and theoretical application of antiemetic practice. Furthermore, patient data about the applied chemotherapies (figure 1) and the real antiemetic practice and the practical adherence to the guidelines were documented.

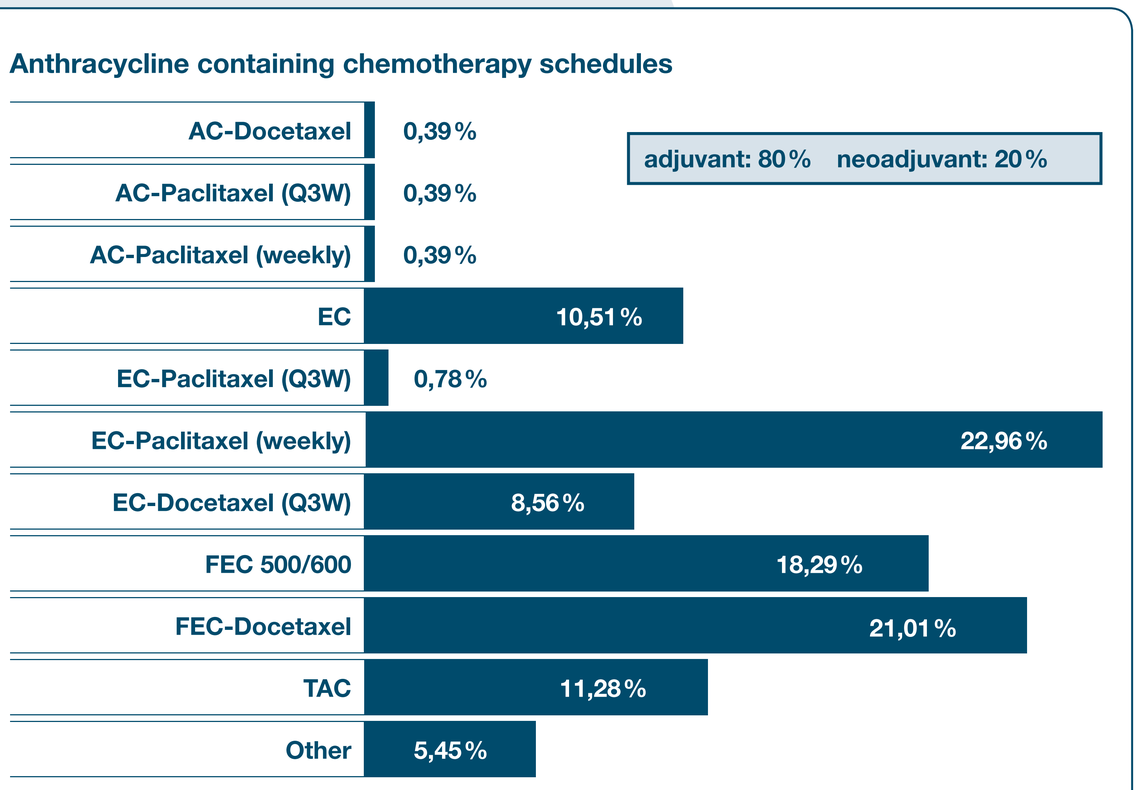

Figure 1

Results

In general, the guidelines are well known by the participating BNGO-doctors. The ASCO guideline is the best known guideline in BNGO-practices (82%), followed by the recommendations of the German Working Group Gynecologic Oncology (AGO) (76%), and the NCCN (31%). The least known guideline is the MASCC/ESMO guideline (22%). In daily practice, antiemetic treatment is mostly applied according to the AGO-recommendations (57%), followed by ASCO (53%), MASCC/ESMO (12%), NCCN (8%), others (2%) or is not based on any guideline at all (2%) (figure 2).

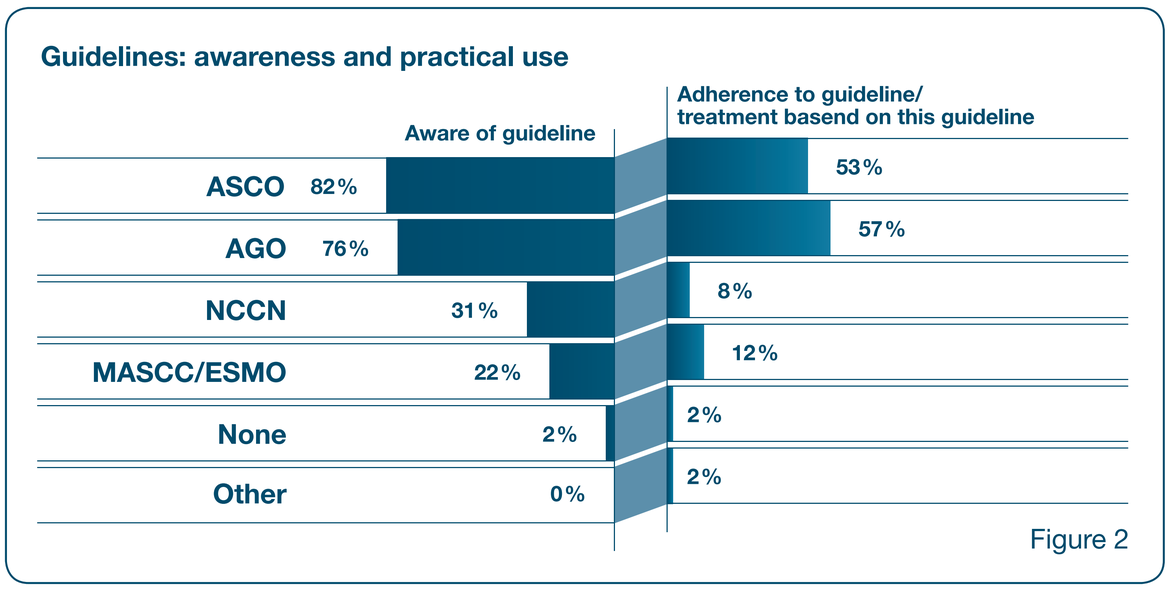

Figure 2

94% of the doctors were aware of the change of the emetogenic risk class of AC/EC into HEC. 84% said that they already used the recommended triple drug antiemetic prophylaxis consisting of 5-HT_3-receptorantagonist ($5HT_3$-RA), NK_1-receptorantagonist NK_1-RA) and dexamethasone (Dex), another 12% planned to do so in the future, and only 4% said they did not want to use the triple drug combination. 19% of the doctors said that they had already changed their treatment behavior. However, the documentation of the real life treatment in 246 patients revealed that in cycle 1 only 33% (82/246 patients) received the triple drug antiemetic prophylaxis recommended in the guidelines, 46% of patients (113/246) received a two drug combination of $5HT_3$-RA and Dex (Figure 3). In cycle 3, 35% (87/246) received the recommended triple drug regimen and 44% (109/246) received a combination of $5HT_3$-RA and Dex. Palonosetron was the most frequently used $5HT_3$-RA in the two drug as well as in the three drug combination on day 1 of both cycles.

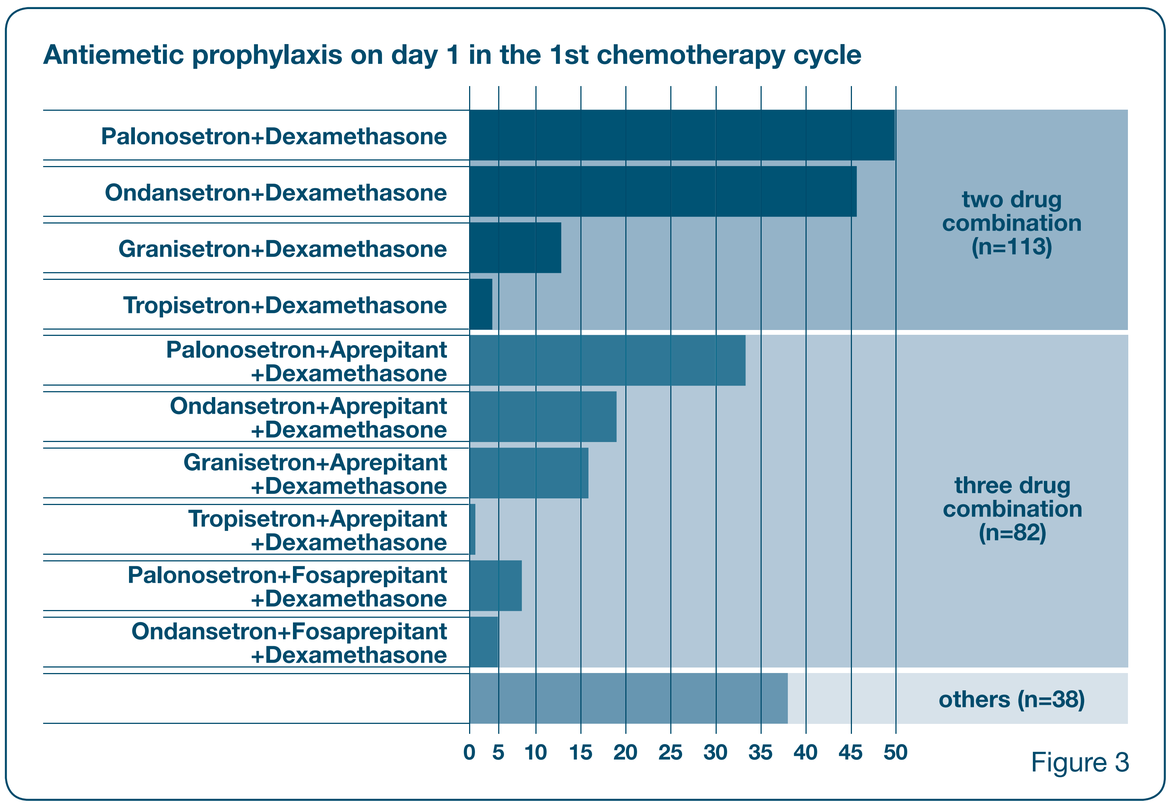

Figure 3

Although the guidelines do not recommend $5HT_3$-RAs in the delayed phase, several patients received them: 65 pts on day 2, 55 patients on day 3, 50 patients on day 4 and 23 on day 5 (cycle 1). In total, 54 out of 246 patients (22%) received the NK_1-RA aprepitant in the delayed phase on day 2 and again 54 pts on day 3 of cycle 1. 13 of the 54 patients received aprepitant as single agent on day 2 and 14 patients on day 3. 38 and 37 pts, respectively, were treated with aprepitant plus dexamethason on day 2 and 3, respectively. From cycle 1 to cycle 3 there were no significant changes in the antiemetic drug use which implies that the doctors in general were satisfied with the antiemetic treatment and saw no reason for an adaptation of their antiemetic strategy.

Conclusion

Although approximately 82% of the doctors who participated in the survey are aware of modern antiemetic guidelines, these guidelines were only applied in 33% of patients in the first cycle of AC-based chemotherapy. There were no significant changes in the treatment behavior between the first and the third treatment cycle, which implies that the doctors in general were satisfied with their antiemetic treatment strategies.

Contact: j.schilling@bngo.de

ASORS-Jahreskongress 2015, Abstract-Nr. 21