SIOG 2017 - Abstract Submission

Track 3: Supportive & palliative care
Other
O12

THE INCIDENCE OF ADVERSE DRUGS EVENT (ADES) CAUSING HOSPITALISATION IN OLDER AND YOUNGER PATIENTS WITH CANCER

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Introduction: Over 60% of all cancers are diagnosed in patients' ≥65 years. These rates are predicted to rise to 70% within the next 30 years (1) (2). Approximately 7% of all hospitalisations are caused by adverse drug events (ADEs) (3) and this rate increases to approximately 10% for older adults (3). To date, there is limited data on ADE rates in oncological patients.

Objectives: The aims of this project were (i) to ascertain the rate of adverse drug reactions (ADEs) causing hospitalisation in patients with cancer (ii) assess whether age impacts on ADE rates and (iii) identify if the incidence of ADEs in this patient cohort differs to that of the general acute medical population.

Methods: This prospective observational study was conducted over a 12-month period. Adults (≥16 years) admitted under a specialists tertiary oncology service were studied. The proportion of patients where a probable/certain ADE, according to WHO-UMC causality assessment (4), caused/contributed significantly to admission were recorded.

Results: 265 participants participated. 54% (n=143) were female. The median age was 66 (IQR57-72), with 52.5% (n=139) ≥65 years, 35.5% (n=94) ≥70 years and 7.5% (n=20) ≥80 years. Adults ≥65 years, compared to younger adults, had significantly more comorbidities, 8 (IRQ5-10) vrs 5 (IRQ3-6) p<0.001, and took more medications, 7 (IQR4-10) vrs 4 (IQR2-7) p=0.026. The most common cancer diagnoses were breast (18.5%), lung (18.5%) and colorectal (9.1%).
ADEs occurred in 30.9% (n=82), of which 27.9% (n=74) caused/contributed significantly to admission. ADE occurrence had no relationship to age p=0.960, gender p=0.399, length of stay p=0.537, or medication number p=0.533. ADEs occurred, in older and younger adults, at similar frequency secondary to non-cancer drugs, 14.4% vrs 9.5%, p=0.141 and cancer specific treatments 13.7% vrs 15.9%, p=0.469.. The most commonly reported ADEs were neutropenia with infection 22.97% (n=17), nausea/vomiting 18.9% (n=14) and constipation 17.6% (n=13).

Conclusion: Approximately 1 in 4 admissions of patients with cancer are medication related. ADEs are caused as frequently by non-cancer drugs as cancer specific treatments in all age groups. Older patients with cancer experience ADEs at similar frequency to their younger counterparts. The ADE rates reported here for patients with cancer are higher than those reported in the general acute population.

References: 1.   Ireland HSE. National Clinical Program for Older People. 2012.
2.   Smith BD, Smith GL, Hurria A, Hortobagyi GN, Buchholz TA. Future of cancer incidence in the United States: burdens upon an aging, changing nation. Journal of Clinical Oncology. 2009; 27(17): 2758-65.
3.   Alhawassi TM, Krass I, Bajorek BV, Pont LG. A systematic review of the prevalence and risk factors for adverse drug reactions in the elderly in the acute care setting. Clinical interventions in aging. 2014; 9: 2079-86.
4.   WHO. World Health Organization (WHO), Uppsala Monitoring Centre. The use of the WHO-UMC system for standardized case causality assessment. Available at: http://www.who-umc.org/graphics/4409.pdf.

Disclosure of Interest: None Declared

Keywords: Adverse drug events