ORAL MUCOSITIS IN HEMATOPOIETIC STEM CELL TRANSPLANTATION: INCIDENCE AND PATIENT COMPLIANCE WITH THE PREVENTION

Midori Nakagaki¹, Glen A Kennedy²

- 1. Pharmacy Department, Royal Brisbane and Women’s Hospital, Brisbane, Australia
- 2. Hematology Department, Cancer Care Services, Royal Brisbane and Women’s Hospital, Brisbane, Australia

BACKGROUND

Oral mucositis (OM) is a common side effect of hematopoietic stem cell transplantation (HSCT).. Oral care, cryotherapy with melphalan and low dose lazer are the only recommended prevention strategies by MASCC guidelines

AIMS

This study aimed to determine the incidence and severity of OM in patients who underwent different types of HSCT in a single Australian centre.

METHODS

Patients who underwent HSCT were consecutively included. Daily OM grade was recorded by the nurses using WHO grading of OM. Patients were asked to retrospectively grade their OM severity on their hospital discharges (nil, mild, moderate or severe). They were also asked whether they had used cryotherapy. In addition, they were asked how frequently they used mouthwashes. Prior to HSCT, all patients received OM education and encouraged to use mouthwashes. They were routinely offered cryotherapy if they received melphalan. Sodium bicarbonate (Sodibic) and normal saline (NS) mouthwashes were provided and prescribed four times a day

RESULTS

Table 1. Patients and regimens

Total patient number was 57 (auto 10, allo 47)

Total N=57	
BEAM auto (N=2)	Auto N=10
HDM auto (N=8)	
FluMel allo (N=24)	Allo N=47
FluMel TCZ allo (N=3)	
FluTBI allo (N=1)	
CyTBI allo (N=10)	
FluCy allo (N=4)	
Mel Flu TBI Haplo (N=3)	
FluCy TBI Haplo (N=2)	

CONCLUSIONS

Despite high compliance for oral care and cryotherapy, oveall 40% of the patients experienced moderate to severe OM. The incidence was higher in allogeneic patients vs autologous. Myeloabrative CyTBI regimen had the highest incidence. Further study is warranted to improve oral OM prevention.

Figure 1. Mucositis severity (Patient reported)

Figure 2. Mucositis severity (WHO grade)

Approximately 40% had moderate-severe / G3-4 OM. The incidence were allo>auto, HDM>FluMel>CyTBI.

Table 2 . Compliance for cryotherapy

Protocol	Patients	Cryotherapy	(%)
Melphalan containing	N=40	39	97.5
Non melphalan containing	N=17	5	29.4
Total	N=57	44	77.2

Figure 3. Compliance for mouthwashes

The compliance for cryotherapy and mouthwashes were high (>90% followed the guidelines).