



Measuring Up Once More!

A clinical audit of chair time for patients receiving Cisplatin to identify if practice change improved institutional chair time

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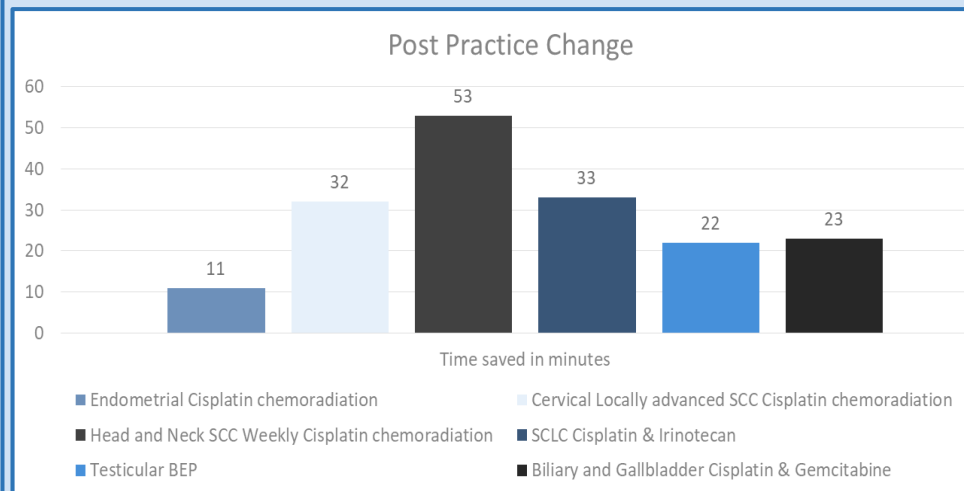
Background

At the Calvary Mater Newcastle outpatient Day Treatment Centre, between 2019 and 2021, a clinical audit was undertaken to determine if urine measurement prior to Cisplatin administration decreased the risk of nephrotoxicity in patients receiving Cisplatin chemotherapy. Data revealed that there was no increase in nephrotoxicity from withholding urine measurement for patients receiving cisplatin with a dose of 60mg/m2 or greater. Based on this data, a practice change was implemented. Patient's receiving Cisplatin of 60mg/m2 or less were no longer required to have urine measurement prior to administration of Cisplatin.

A secondary clinical audit was undertaken, and pre and post data was analysed to determine if this change made a difference in chair time overall. Additional analysis was performed to compare the same regimens pre and post clinical practice change to highlight any differences between sub-groups.

Results

- The average time with all-time differences in consideration was -22 minutes in the department
- The greatest time difference was in the Head and Neck SCC Weekly Cisplatin chemoradiation group with -53 minutes change in the post practice change group
- 8 of the 16 regimens were not comparable due to regimens not being used within the pre/post period
- 6 of the 8 regimens showed a reduction in patient time in the department in the post practice change group
- 1 of the 8 regimens showed equal time in the department
- 1 of the 8 regimens showed an increase in time in the department
- There was an increase in time in the department in the NSCLC Cisplatin & Etoposide chemo radiation with +24 minutes



Reasons for delays

Pre-practice change:

- 62 documented delays
- Most common documented delays:
 - Extra intravenous fluid required to achieve adequate urine output prior to cisplatin administration: N= 10
 - Required review by MO/NP: N=14
 - Diuretics for fluid overload: N= 10

Post-practice change:

- 19 documented delays
- Most common documented delays:
 - Required review by MO/NP: N=5
 - Required pre medications due to previous hypersensitivity: N=5

Conclusion

Overall this practice change had positive outcomes to reduce patient time in the department.

With an average reduction of time of 22 minutes, this contributes to increased capacity for the department and less time spent in the department for patients.

Tumour Stream	Regimen	Time in hrs:mins	Time difference
Gynaecological	Endometrial Cisplatin chemoradiation	Pre: 5:21 Post: 5:10	- 11 mins
	Cervical Locally advanced SCC Cisplatin chemoradiation	Pre: 5:04 Post: 4:32	- 32 mins
	Vulval Cisplatin chemoradiation	Pre: 5:14 Post: No comparison	N/A
Head and Neck	Head and Neck SCC Weekly Cisplatin chemoradiation	Pre: 5:11 Post: 4:18	- 53 minutes
Respiratory	NSCLC Cisplatin & Docetaxel chemoradiation	Pre: 4:41 Post: No comparison	N/A
	NSCLC Cisplatin & Etoposide	Pre: 5:47 Post: No comparison	N/A
	NSCLC Cisplatin & Etoposide chemoradiation	Pre: 5:17 Post: 5:41	+ 24 minutes
	NSCLC Cisplatin & Vinorelbine	Pre: 4:06 Post: No comparison	N/A
	SCLC Cisplatin & Etoposide chemoradiation	Pre: 5:58 Post: No comparison	N/A
	SCLC Cisplatin & Irinotecan	Pre: 5:40 Post: 5:07	-33 minutes
Testicular	Testicular BEP	Pre: 4:26 Post: 4:04	-22 minutes
	Testicular EP	Pre: 4:29 Post: 4:29	equal
Upper Gastrointestinal	Biliary and Gallbladder Cisplatin & Gemcitabine	Pre: 4:39 Post: 4:16	-23 minutes
	Gastroesophageal Docetaxel, Cisplatin & Fluorouracil	Pre: 4:51 Post: No comparison	N/A
	Gastric and Oesophageal Cisplatin & Capecitabine	Pre: No comparison Post: 4:37	N/A
Urogenital	Bladder Cisplatin with weekly RT	Pre: 5:44 Post: No comparison	N/A