

Administration issues in cancer
management focus on rare
complications

INCIDENCE OF VASCULAR PAIN FOLLOWING GEMCITABINE CHEMOTHERAPY INFUSION WITH MODIFIED DILUENT

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Background

- In previous practice, 100 ml of 0.9% sodium chloride for injection was used as diluent for gemcitabine.
- According to our experience around a quarter of patient receiving gemcitabine diluted in 100 ml of 0.9% sodium chloride via peripheral vein experienced severe vascular pain.
- Co-administration with normal saline when reinitiation.
- A volume of diluent was modified from 100 ml to 250 ml that can be managed to complete infusion within 30 minutes.

Objective

- **To determine incidence and severity of vascular pain following modified diluent for gemcitabine solution.**

Methods

- The observational study.
- Cancer patients who were treated with gemcitabine based regimen during **June to November 2015** were enrolled in the study.
- Gemcitabine (1000-1250 mg/m²) was diluted in 250 ml of normal saline **and infused over 30 minutes peripherally**.
- Vascular pain incidence and severity were assessed during drug administration using visual analogue scale (VAS).
- Incidences of vascular pain had been collected and analyzed by **descriptive statistic**.

Patient Characteristics

- One hundred patients were enrolled in the study
- 51% were male and 49% were female.
- Their mean (SD) age was 61 ± 1 years.
- Non-Small Cell Lung Cancer was the most common cancer followed by pancreatic cancer and cholangiocarcinoma.

Results

Pain score	Severity	Patients (%)
0	-	64 (64%)
1-3	Mild pain	28 (28%)
4-6	Moderate pain	8 (8%)
7-10	Severe pain	0 (0%)

Results

- The vascular pain incidence was reported in 36 patients (36%).
- 28 patients (78%) and 8 patients (22%) were reported mild and moderate pain severity, respectively.
- Severe pain had not been found .
- **Mean vascular pain score was 1.3 ± 0.56 .**

Conclusion

- This study demonstrated that using of 250 ml of normal saline as diluent for gemcitabine chemotherapy, the vascular pain incidence was 36% and The pain score appeared to be minimal.
- Mean \pm SD of pain score is 1.3 \pm 0.56 and there was not incidence of severe pain.

Reutine Practice :Present

- We use NSS 250 ml. as diluent for Gemcitabine.
- All patient can receive medication as per prescription.