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CASE REPORT

A Case Report on Sucralfate Induced Constipation

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ABSTRACT

Mucosal protective agent are drugs that protects the mucosal lining of the stomach from acidic gastric juices. Sucralfate is a very safe and commonly prescribed drug indicated in the short term treatment of active duodenal ulcers, gastrointestinal reflux disease, NSAID induced ulcers, gastric ulcers, oral and oesophageal ulcers. sucralfate is a salt of sucrose complexed to sulfated aluminium hydroxide. In the presence of acid it forms a viscous tenacious paste that binds selectively to ulcers or erosions for upto 6 hours. Diagnosis of constipation after sucralfate administration is clinically based and straight forward. Constipation is among the most common adverse effect of most drugs which includes calcium channel blockers (verapamil), opioids (tramadol, morphine),ulcer protective agents (sucralfate) . Sucralfate has been reported as a safe drug during last 10 years of its use. constipation is very common adverse effect reported with sucralfate administration because it directly interacts with the stomach lining and inhibits the digestive process . Management of constipation does not require any medications it can be subsided by withdrawal or stoppage of drug that is responsible for causing constipation (sucralfate).

Key words: Sucralfate , ulcer protective agent ,constipation.

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1. Introduction

Mucosal protective agent are drugs that protects the mucosal lining of the stomach from acidic gastric juices. Sucralfate is a very safe and commonly prescribed drug

indicated in the short term treatment of active duodenal ulcers, gastrointestinal reflux disease, NSAID induced ulcers, gastric ulcers, oral and oesophageal ulcers.

sucralfate is a salt of sucrose complexed to sulfated aluminium hydroxide[10]. In the presence of acid it forms a viscous tenacious paste that binds selectively to ulcers or erosions for upto 6 hours. Diagnosis of constipation after sucralfate administration is clinically based and straight forward. Constipation is among the most common adverse effect of most drugs which includes calcium channel blockers (verapamil), opioids (tramadol, morphine),ulcer protective agents (sucralfate) 1,12. Aluminum-containing drugs such as sucralfate and antacids can cause constipation, and these drugs may be replaced by proton pump inhibitors 2,3. constipation is very common adverse effect reported with sucralfate administration because it directly interacts with the stomach lining and inhibits the digestive process .The patient complaints of constipation on the next day of treatment with sucralfate (within 48 hours). About 1-3% of people using sucralfate has been developed constipation.

Table 1: Drugs That Commonly Cause Constipation

| S.No | Category | Examples |
|------|---------------------------|--|
| 1. | Antacids | Aluminiumhydroxide , calcium carbonate |
| 2. | Anticholinergics | Benzotropine, Glycopyrrolate |
| 3. | Anticonvulsants | Carbamazepine Divalproate |
| 4. | Antihistaminics | Diphenhydramine Loratadine |
| 5. | Antiulceratives | Sucralfate |
| 6. | Antimuscarinics | Darifenacin, Oxybutynin, Solifenacin |
| 7. | Antipsychotics | Olanzapine, Clonazepine Quetiapine |
| 8. | Benzodiazepins | Alprazolam, Estazolam |
| 9. | Calcium channel blockers | Diltiazem, Verapamil |
| 10. | Diuretics | Furosemide, Hydrochlorothiazide |
| 11. | Muscle relaxants | Cyclobenzaprine, Metaxalone |
| 12. | GI antispasmodics | Hyoscyamine, Dicyclomine |
| 13. | opiates | Codeine, Meperidine, morphine |
| 14. | Sedative-hypnotics | Zolpidem, Phenobarbitol |
| 15. | Tricyclic antidepressants | Amitriptyline |

2. Case Report

A 45 years male patient was presented in the male medical ward with the chief complaints of chest pain, vomiting, nausea, heart burn, and backache since 3 days. on the day of admission he was kept on treatment based on her

complaints. on day 2 the patient complaints of constipation. For which the sucralfate suspension was withdrawn from that day itself. Sucralfate suspension is given for reducing the symptoms like heart burn. The patient complaints on constipation on next day of treatment.

Treatment Outcome And Follow UP:

For constipation there will be no drug prescribed by the physician. only the sucralfate suspension is withdrawn and alternately proton pump inhibitor(pantoprazole) is prescribed for decreasingthe symptoms of patient the ADR was subsided within 24 hours of discontinuation of drug.

Table 2: Treatment of constipation

| S.No | General Measures |
|------|-------------------------------------|
| 1 | Adequate fluid intake |
| 2 | High fiber contents in diet |
| 3 | Regular exercise |
| 4 | Regulation of bowel habit |
| 5 | Avoid drugs causing constipation |
| 6 | Use drugs (Laxatives or purgatives) |

3. ADR Assessment

After collection of all the subjective and objective data it was suspected that the current treatment with the sucralfate is responsible for the occurrence of constipation. After checking all the ADR profiles of prescribed drugs it was confirmed that sucralfate has a most probable relation in causing this reaction. ADR assessment is done by using scales like narinjo scale and WHO-UMC scales and those scales conforms this reaction is a probable type as shown in table 1.

Discussion: Constipation is the condition of the digestive system where an individual has hard faeces that are difficult to expel¹⁵. In most cases, it occurs because the colon has absorbed too much water from food that is in the colon. Constipation happens when the colon absorbs too much water. In the majority of cases, constipation resolves itself without any treatment or risk to health [12, 13]. The treatment of recurring constipation can include lifestyle changes such as doing exercise, eating more fibre and drinking more water¹⁴. Usually laxatives will successfully treat most cases of constipation but should be used with care and only when necessary. Sucralfate has been reported as a safe drug during last 10 years [6, 7]. Constipation with sucralfate is subsided by either discontinuation of drug or altered with other drugs having similar effect. Generally aluminium containing antacids like sucralfate are replaced by proton pump inhibitors [7, 8].

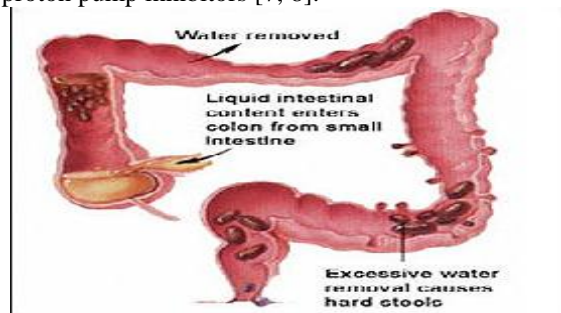


Figure 1



Figure 2

4. Conclusion

Even though there is minimal possibility of getting adverse effect like constipation by using antiulcerative drugs like sucralfate the health care providers play a major role in minimizing such complications and treat them with appropriate drugs. By using sucralfate the constipation occur after first dose and should be vigilant on recognizing constipation and treatment is provided ideally.

Table 3: Causality assessment of suspected ADR

| S.No | Suspected drug | ADR | Narinjo scale | WHO |
|------|----------------|--------------|---------------|----------|
| 1. | Sucralfate | constipation | Probable | Probable |

Table 4: Causality assessment of suspected ADR

| ADR | Suspected drug | Severity | Predictability | Preventability |
|---------------------------------|----------------|----------|----------------|----------------------|
| Sucralfate induced constipation | Sucralfate | moderate | Predictable | Probably Preventable |

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