

## A Rare Case of Intolerance to Medically Approved Dose of Sildenafil Citrate in a Young Healthy Patient

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### Abstract

Acute a 32 year old male came to emergency department with complaint of diaphoresis, multiple episodes of vomiting associated with lower abdominal pain and a choking sensation that leads him feeling of shortness of breath. On local examination there was no scar marks, no redness on body. On further examination the patient was conscious and little drowsy but in arousable state. On further evaluation, the patient was hypotensive with tachycardia and tachypnoea.

Patient had no known comorbidity. On further assessment patient and his attendant gave history of ingestion of tab Viagra 75 mg orally 5 hours back prior coming to the hospital. As per patient symptoms started after 2 hours of ingestion of tab Viagra 75 mg. Patient was immediately taken on to symptomatic supportive treatment with intravenous fluids, ionotropic support and oxygen support. All relevant investigations sent from emergency department and patient was advised admission in Intensive Care Unit for observation. Patient was discharged after an observation period of 24 hours in haemodynamically stable condition.

**Keywords:** Sildenafil citrate; Intravenous fluids; Ionotropic support; Oxygen support.

### INTRODUCTION

*Sildenafil Citrate*: is used to treat erectile dysfunction and pulmonary arterial hypertension and is available in tablet form to be taken orally and in injection form to be inject in vein. Sildenafil citrate acts in sexually aroused state by blocking

phosphodiesterase 5 enzyme that believed to promote breakdown of cGMP. It also dilates pulmonary blood vessels.

Sildenafil citrate prevents degradation of cyclic guanosine monophosphate (cGMP) in corpus cavernosum. Also in penile corpus cavernosum nitric oxide combines with guanylate cyclase

receptors that leads to enhance the level of cGMP that ultimately leads to vasodilation.

The common side effects of sildenafil citrate are photophobia, impaired and blurred vision, flushing, headache, gastrointestinal upset, nasal congestion. Evidence of colour vision abnormality also exists as some patient gave complaint of seeing everything blue after taking the medicine.

Some other side effects also do exist. As we know that sildenafil citrate acts as arterial dilator so it can cause low blood pressure, ventricular arrhythmias and can lead to myocardial infarction or stroke. Sometimes it can lead to increase in intraocular pressure and also can cause sudden hearing loss. Prolonged erection is also a serious side effect of sildenafil citrate.

Protease inhibitor, cimetidine, erythromycin can inhibit or interfere with metabolism of the sildenafil citrate. Sildenafil citrate also contraindicated if the patient is taking any vasodilator drug or has cardiovascular disease and advised not to be involved in sexual activity or, having hypersensitivity to sildenafil citrate

## CASE STUDY

A 32 year old male came to emergency department with complaint of diaphoresis, multiple episodes of vomiting associated with lower abdominal pain and a choking sensation that leads him feeling of shortness of breath. On local examination there was no scar marks, no redness on body. On further examination the patient was conscious and little drowsy but in arousable state. On further evaluation, the patient was hypotensive with tachycardia and tachypnoea.

Patient had no known comorbidity. On further assessment patient and his attendant gave history of ingestion of tab Viagra 75 mg orally 5 hours back prior coming to the hospital. As per patient symptoms started after 2 hours of ingestion of tab Viagra 75 mg. Patient was immediately taken on to symptomatic supportive treatment with intravenous fluids, ionotropic support and oxygen support. All relevant investigations sent from emergency department and patient was advised admission in Intensive Care Unit for observation. Patient was discharged after an observation period of 24 hours in haemodynamically stable condition.

### *Course in the Hospital and Outcome*

A 32 year old male came to emergency department with complaint of diaphoresis, multiple episodes

of vomiting associated with lower abdominal pain and a choking sensation that leads him feeling of shortness of breath. On examination in primary survey, the patient was talking in full sentences, no oral secretions was present, no extra added sounds heard while breathing suggestive of patent airway, no respiratory discomfort but the patient was tachypneic with respiratory rate of 30 per minute. On further evaluation, the patient was hypotensive with tachycardia. Blood pressure was 80/60 mmhg and pulse was 125 per minute. Patient was conscious and little drowsy but in arousable state. Pupils was normally reacting to light bilaterally and no anisocoria present. Random blood sugar was 115 mg/dl. There was no scar marks, no redness on body. Patient was immediately taken on to symptomatic supportive treatment with intravenous fluids, ionotropic support and oxygen support. While taking history of present illness patient and his attendant gave history of ingestion of tab Viagra 75 mg orally 5 hours back prior coming to the hospital. Symptoms started after 2 hours of ingestion of tab Viagra 75 mg as per patient. Patient had no known comorbidity.

All relevant investigations sent from emergency department and patient was advised admission in Intensive Care Unit for observation. Patient was discharged after an observation period of 24 hours in haemodynamically stable condition.

## DISCUSSION AND THERAPEUTIC CONSIDERATIONS

The blue coloured diamond shaped pills was popular amongst and used by old tired men once but now it has gained popularity amongst youngsters too because of its magical potent effects on human body. Many youngsters are using it to deal with their psychological issues for examples, stress, anxiety and to improve performance in sexual activity. Here the question arises that is it ok to take sildenafil citrate tablets in young age? well the answer depends upon the reason behind taking the medicine. There is a perceived expectation which if not met during sexual activity lead to embarrassment and loss of confidence in subsequent activities further. Such psychological issues even lead to short term erectile dysfunction. Each time while having sex the man will take stress about his performance and this anxiety will not let him to involve in his moments and ultimately he will lose the erection. In many cases in youngsters it becomes a chronic problem. To improve such anxiety, fear of poor performance and to gain

confidence and to treat the issue whether it is transient or long term have to consult with general practitioner and if he prescribe the medicine its ok to take it in recommended doses. Sildenafil citrate is used in some other medical conditions for example pulmonary arterial hypertension.

#### *Dose of sildenafil citrate in erectile dysfunction*

Initial dose: 50 mg orally once a day one hour prior to sexual activity.

Maintenance dose: 25-100 mg orally once in a day one hour prior to sexual activity.

#### *Dose of sildenafil citrate in pulmonary arterial hypertension*

Initial dose: 5-20 mg orally thrice in a day 4-6 hours apart.

Maximum dose: 20 mg orally thrice in a day.

Injection initial dose: 2.5-10 mg i/v bolus thrice in a day.

## CONCLUSION

As we already discussed above about the popularity of sildenafil citrate amongst youngsters, an emergency physician should know about the drug and its adverse effects because in high dose ingestion and without proper treatment, patient can lose his life. An emergency physician should know about the consequences and pathology which can occur after overdose consumption of sildenafil citrate. As our patient took the medicine within the medically recommended dose, his symptoms flared up transiently and then as he got an early proper treatment, he became well and discharged at haemodynamically stable condition. We just don't have to forget that patient can be intolerant to medically recommended dose of sildenafil citrate. It depends upon various factors for example, hypersensitivity to drug, heart disease, already taking any arterial dilator medication, fasting state etc.

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