



SEVERE VASOVAGAL REACTION IN DENTAL PROCEDURE.

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ABSTRACT

Vasovagal syncope is a sudden loss of consciousness mediated by the vagus nerve. It occurs when the vagus nerve is overreactive to certain triggers, such as the sight of blood or extreme emotional distress, and causes a sudden drop in blood pressure, pulse or both. It is the most common type of fainting and most frequently found in adolescents and in older adults. We are presenting a case of 23 year old female came for tooth extraction of third molar, no past history of any cardiac disease, diabetes, asthma, epilepsy or any major illness. Patient was very much anxious about the procedure as she visited first time for any such procedure. After proper counseling and written consent, she was taken to dental chair for procedure. She was still anxious, and again counseling done, but even before starting procedure, when instrument trolley was getting prepared, she suddenly collapsed. Immediately TRENDLENBURG POSITION given. Her BP fall to 94/60 mmhg, and pulse was reduced to alarming 40 beats per minute, immediately atropine 2cc (1.2 mg) diluted in 10cc ns given fast iv bolus. After that patient's heart rate quickly regained to 102 beats per minute and she started gaining consciousness. After that procedure was not done and she was sent to physician for her further checkup. Her 2d echo, TMT, BP, pulse, and her routine cardio, respiratory, and neurological examination was normal. Vaso vagal syncope is rarely that severe. Almost fatal severity of vasovagal syncope made us to report this case.

KEYWORDS : VASO VAGAL SYNCOPES, BRADYCARDIA, ATROPINE, TRENDLENBURG POSITION.

Introduction

Syncope is the abrupt and transient loss of consciousness due to a temporary reduction in cerebral blood flow, associated with an absence of postural tone, followed by a rapid and usually complete recovery. Neurocardiogenic (vasovagal) syncope is the most common of a group of neurally mediated syncopes, characterized by a sudden failure of autonomic regulatory mechanisms to maintain adequate blood pressure and, occasionally, heart rate, to sustain cerebral perfusion and consciousness. We are presenting rare very severe vasovagal syncope, resulted in severe bradycardia.

Case report

- 23 year old female came for tooth extraction of third molar. patient was conscious oriented at time of presentation. All routine preprocedural reports like S.HIV, HBSAG, HCV, are negative. RBS was 118 mg/dl, BP 110/70 mmhg, pulse 96 per minute. No past history of any cardiac disease, diabetes, asthma, epilepsy or any major illness.
- Patient was very much anxious about the procedure as she visited first time for any such procedure. After proper counseling and written consent, she was taken to dental chair for procedure. She was still anxious, and again counseling done, but even before starting procedure, when instrument trolley was getting prepared, she told she was feeling giddiness and blackout and in next few seconds she suddenly collapsed.
- Immediately TRENDLENBURG POSITION given. Her BP fall to 94/60 mmhg and pulse was reduced to alarming 40 beats per minute and reducing, immediately atropine 2cc (1.2 mg) diluted in 10cc ns given fast iv bolus. After that patient's heart rate quickly regained to 102 beats per minute and she started gaining consciousness. After that procedure was not done and she was sent to physician for her further checkup.
- Her echocardiography report suggestive of normal lv systolic function, no RWMA, no any valvular lesions, no pericardial effusion or clot or vegetation.
- ECG: WNL (normal)
- TMT: TMT was negative for inducible ischemia.
- BP, pulse, and her routine cardiological examination was normal.
- respiratory : bilateral air entry equal and normal, no

adventitious sound heard like rhonchi or crepsor rub. Chest Xray view: Normal.

- neurological examination: Clinically NAD.
- CBC, S.CREATININE, S.ELECTROLYTES were normal.
- Vasovagal syncope is rarely that severe. Almost fatal severity of vasovagal syncope made us to report this case.
- Discussion
- Vasovagal syncope is a sudden loss of consciousness mediated by the vagus nerve. It occurs when the vagus nerve is overreactive to certain triggers, such as the sight of blood or extreme emotional distress, and causes a sudden drop in blood pressure, pulse or both. It is the most common type of fainting [1][2] and most frequently found in adolescents and in older adults. [3]
- Syncope is the abrupt and transient loss of consciousness due to a temporary reduction in cerebral blood flow, associated with an absence of postural tone, followed by a rapid and usually complete recovery. Characterized by a sudden failure of autonomic regulatory mechanisms to maintain adequate blood pressure and, occasionally, heart rate, to sustain cerebral perfusion and consciousness. [4]
- Hypotension and bradycardia likely caused cerebral hypoperfusion, leading to fainting. The intense parasympathetic tone triggered by somatic or emotional stress was likely responsible for directly depressing the sinus node leading to bradycardia. Appropriate treatment for VVS includes the administration of intravenous fluids, vagolytics (atropine), ephedrine, and the rapid use of the Trendelenburg position. [5]
- Vasovagal syncope is rarely that severe. Almost fatal severity of vasovagal syncope made us to report this case.
- Severe bradycardia with asystole due to vasovagal syncope is seen in two patients. case reports. [5]
- Rapid recognition of symptoms and signs of vaso vagal syncope and prompt use of TRENDLENBURG POSITION, atropine, iv fluids, epinephrine are life saving. [5]

References

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