Importance of preanesthetic evaluation in emergency: Are we in haste?

Sir,

The pre-anaesthetic assessment helps determine the anaesthetic risk, plan anaesthetic technique to reduce the morbidity and mortality associated with surgery.[1,2]

We would like to report the case of a fifty one year old male presenting with traumatic amputation of bilateral lower limbs as a result of a suicide attempt on the railway tracks. The intraoperative course of emergency amputation performed without any detailed pre-anesthetic evaluation was uneventful. who underwent emergency amputation uneventfully. Following surgery, he developed depression, non-compliance to treatment, and was started on haloperidol due to his current state of delirium. Ten days after the first surgery, the stump of the right leg was deemed to be septic and planned for debridement. On preoperative evaluation, patient appeared agitated and restless, was sweating, and had a heart rate of 140 bpm associated with hypertension of 160/110 mmHg. During examination, patient was found to have rigidity. Investigations including arterial blood gases, hemogram, serum electrolytes, cardiac biomarkers, and creatinine phosphokinase (CPK) were warranted. The cpk levels were found to be 1200 U/L. Other investigations revealed hemoglobin of 7 gm%, potassium of 5.5 meq/L, leukocyte count of 15000/mm^3 and provisional diagnosis of NMS was made and the patient was started on bromocriptine after which his symptoms subsided and his CPK levels gradually improved. Subsequently, debridement of amputated stump was carried out under general anesthesia and was uneventful.

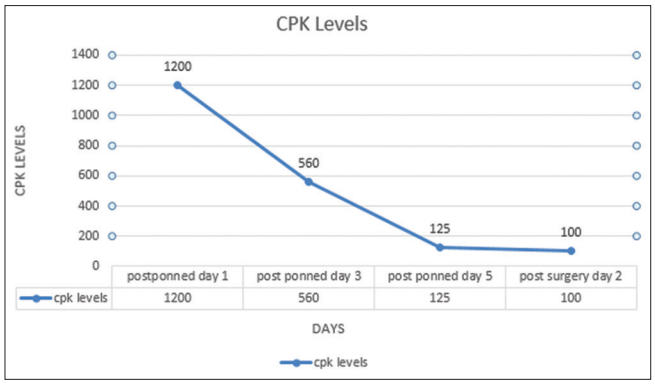

Figure 1: CPK levels

NMS is caused by a complex interaction between the neuroleptics and host susceptibilities. Major symptomatology includes hyperthermia, tachycardia, diaphoresis, muscle rigidity, tremor, mutism, and altered consciousness. Nonspecific laboratory abnormalities include elevated CPK and leucocytosis.[3] In our case, most of the above features were present. Haloperidol is the most common culprit associated with NMS. Initiation of neuroleptics or an increase in dosage or rarely sudden discontinuation can trigger NMS.[4] In current case patient received haloperidol for period of five days and developed NMS. Treatment requires immediate discontinuation of the neuroleptic drug and the provision of supportive measures. Our patient was started on bromocriptine 2.5 mg TDS which was increased to 5 mg TDS after two days as there was no improvement clinically. Subsequently patient was taken up for surgery after five days of bromocriptine treatment with creatinine kinase levels of 125 IU/L [Figure 1]. The patient underwent an uneventful surgery under general anesthesia and was discharged on third post-operative day.

Pre-anesthetic evaluation plays a pivotal role in emergency department. Prior detection of syndrome appeared to be a boon for both patient and anesthesiologist. Hence, the importance of pre-anesthetic evaluation should never be undermined.

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References

1. Halaszynski TM, Juda R, Silverman DG. Optimizing postoperative outcomes with efficient preoperative assessment and management. Crit Care Med 2004;32:76-8.
2. Asakura Y, Fujiwara Y, Komatsu T. The WHO analgesic ladder and neuroleptic malignant syndrome. Acta Anaes Scand 2006;50;1311-12.
3. Caroff SN, Mann SC. Neuroleptic malignant syndrome. Med Clin North Am 1993;77;185-202.
4. Shalev A, Munitz H. The neuroleptic malignant syndrome: Agent and host interaction. Acta Psy Scand 1986;73;337-47.

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