

Case Report

A Case Report of Compression Only CPR for a Out of Hospital Cardiac Arrest Victim During COVID – 19 Lockdown Period Complying With The ISA – IRS COLS Guidelines

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Abstract: A case of 35 year old male who had sustained motor vehicle crash with a four wheeler while riding on his motorcycle on a national highway during the lockdown period. During his transit to hospital in the tractor, we had noticed the patient to be unresponsive with GCS of three (E₁V₁M₁) and no carotid pulse. Immediately compression only CPR (CO CPR) given with cervical spine in line manual stabilization throughout the procedure with the help of another bystander. After approximately 4 cycles (30 compressions each) of CO CPR, ROSC attained. In spite of being alone in a resource limited setting we are able to comply with the IRC guideline of COLS and had successfully revived the patient.

Keywords: COLS,ISA,IRS,CPR.

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INTRODUCTION

Timely bystander CPR has proved invaluable for saving lives in many instances. In view of teaching this valuable lifesaving technique to the lay persons, many training programs has been implemented worldwide. Recently ISA has launched compression only CPR initiative to reach out to the unprivileged masses. In-spite of all these efforts, there is still a stigma among the common people to do CPR outside the health care setting. To overcome this deficit, there lies a responsibility with every health care provider to teach this skill to the common people whenever and wherever required. In this regard we hereby reporting a scenario where a health care provider was compelled to provide compression only CPR for a case of out of hospital cardiac arrest during the dangerous time of COVID 19 pandemic.

CASE REPORT

A case of 35 year old male who had sustained motor vehicle crash with a four wheeler while riding on his motorcycle on a national highway during the lockdown period. Upon arrival at the scene, patient was found in the middle of the highway with a GCS of four

(E₁V₁M₂) making grunting sounds with a feeble carotid pulse.

Immediately scene safety was ensured along with manual in line stabilization of cervical spine, jaw thrust given and emergency response team activated. Within 15minutes patient was shifted to emergency department (ED) of a tertiary care hospital in a tractor which happened to pass by.

During his transit to hospital in the tractor, we had noticed the patient to be unresponsive with GCS of three (E₁V₁M₁) with no carotid pulse. Immediately compression only CPR (CO CPR) given with cervical spine in line manual stabilization maintained throughout the procedure with the help of another bystander .After approximately 4 cycles (30 compressions each) of CO CPR, ROSC attained.

After arriving at the emergency department ,vitals were recorded which revealed blood pressure to be 90/40mmHg,heart rate 120/min, normal sinus rhythm and peripheral oxygen saturation of 88%.Auscultation revealed bilateral crackles.Peripheral intra venous cannula secured and fluids administered.

Thorough primary survey and secondary survey was done which revealed traumatic brain injury with right temporal intraparenchymal bleed and bilateral fore arm fractures .Emergency decompressive craniotomy done and shifted to ICU for further management. Patient extubated on post op day 3 after satisfying the necessary criteria.

DISCUSSION

Indian Resuscitation Council (IRC) formed by the Indian Society of Anesthesiologists (ISA) has developed a practice guideline of CPR – Compression Only Life Support (COLS) as every minute’s delay in resuscitation reduces the survival chance by 7%-10% (1). In accordance with the above guideline CPR was started immediately.

ISA has recently launched a guideline for managing COVID 19 patients where it has introduced the term “Protected Code Blue” emphasizing the need for protective precautions while performing CPR.As our scenario is a out of hospital setting we were compelled to do CPR only with gloves as a protective precaution.(2)

Studies has shown no difference in CPR related exhaustion between the standard and compression only techniques during a 10-minute CPR simulation test (3) (4).In our case,we are able to perform CPR uninterrupted for 10 minutes until the attainment of ROSC.

Riva *et al.* in their systematic review reported no difference in 30 day survival rate between standard CPR group and compression only CPR group (13.8% and 13.5% respectively).(5) Our patient had been successfully revived with COLS and discharged in a stable state.

CONCLUSION

The take home message from this case is we should be always carrying the necessary protective equipment in our vehicle and try to teach the COLS technique to the general public whenever and wherever possible.

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