CARDIOPULMONARY RESUSCITATION – A REVIEW ARTICLE

Fateme Parooei 1, Zohreh Mahmoodi 2, Raziyeh Behzadmehr 3, Mahmood Anbari 4, Morteza Salarzaei 1, Dadkhoda Soofi 5

1 Student of Medicine, Students Research Committee, Zabol University of Medical Sciences, Zabol, Iran
2 Department of Cardiology, Faculty of Medicine, Zabol University of Medical Sciences, Zabol, Iran.
3 Assistant Professor, Department of Radiology, Faculty of Medicine, Zabol University of Medical Sciences, Zabol, Iran.
4 Zabol University of Medical Sciences, Zabol, Iran
5 Department of Internal Medicine, Amir al-Momenin Hospital, Zabol University of Medical Sciences, Zabol, Iran.

Abstract:
Introduction: Cardiac arrest is one of the major causes of increased mortality and morbidity worldwide. Regarding the occurrence of physiological changes in the vital system of pregnant mothers and reminders, it must be stated that the fact that heart disease in pregnant women can endanger two lives simultaneously, it is clearly indicative of the importance of taking correct remedial and precautionary measures. On the other hand, since the implementation of cardiopulmonary arrest on pregnant women cause incidents, timely and correct remediation is associated with a high percentage of success. Therefore, the purpose of this study was to review the recovery of heart rhythm in pregnant mothers.

Methods: In this review article, the databases Medline, Cochrane, Science Direct, and Google Scholar were thoroughly searched to identify the studies investigating Pulmonary cardiopulmonary resuscitation. In this review, the papers published until early January 2017 that were conducted to study the Paget’s disease were selected. In searching for the articles, those English papers were selected that had investigated Pulmonary cardiopulmonary resuscitation.

Results: Side effects such as heart rhythm disorders and pulmonary edema usually arise in the context of old heart disease and follow physiological changes in the cardiovascular and pulmonary causes which, unless treated timely and correctly, may lead to cardiac arrest.

Conclusion: In case of cardiac arrest, ventilation of pregnant mothers is initially performed by mask and bag valve mask and the oxygen core. If additional ventilation is needed, intubation of the trachea should be done as soon as possible and the ventilation must continue through the tracheal tube and bag valve mask; finally, in case of prolonged cardiac and respiratory difficulty, long-term ventilation can be used.

Keywords: Pulmonary, cardiopulmonary, resuscitation

Corresponding author:
Morteza Salarzaei,
Medical student, Student Research Committee,
Zabol University of Medical Sciences, Zabol, Iran
Email: mr.mortezasalar@gmail.com
Tell: +989120644917

Please cite this article in press as Morteza Salarzaei et al, Cardiopulmonary Resuscitation-Review Article, Indo Am. J. P. Sci, 2017; 4[08].
INTRODUCTION:
Cardiac arrest is one of the major causes of increased mortality and morbidity worldwide and the results obtained have shown an increase in its incidence gradually over the past two decades, to an annual rate of about 400,000 in the United States and in 700,000 individuals in Europe[1]. The death toll from cardiac arrest in the United States has hit 16,6,200 cases a year[2]. Cardiac arrest is a critical, acute and important emergency that occurs anywhere in the hospital or in the hospital environment and it might even occur out of the hospital[3]. If cardiopulmonary resuscitation operation is performed promptly and correctly, it can save the individual and increase the survival chance of the subject two to three times[4]. Cardiovascular disease can play an important role in preventing deaths by as much as 25%[5]. In other words, cardiopulmonary resuscitation is necessary to the extent to which it is correctly understood and performed to save a person’s life[3]. Pulmonary cardiology is a life-saving skill and, in fact, a lifesaving technique that includes the use of cardiac chest compressions, artificial respiration, a defibrillator to restore blood flow, and oxygenation during cardiac arrest[6]. Regarding the occurrence of physiological changes in the vital system of pregnant mothers and reminders, it must be stated that the fact that heart disease in pregnant women can endanger two lives simultaneously, it is clearly indicative of the importance of taking correct remedial and precautionary measures[7]. On the other hand, since the implementation of cardiopulmonary arrest on pregnant women cause incidents, timely and correct remediation is associated with a high percentage of success[8]. Therefore, the purpose of this study was to review the recovery of heart rhythm in pregnant mothers.

METHODOLOGY:
In this review article, the databases Medline, Cochrane, Science Direct, and Google Scholar were thoroughly searched to identify the studies investigating pulmonary cardiopulmonary resuscitation. In this review, the papers published until early January 2017 that were conducted to study the Paget’s disease were selected. In searching for the articles, those English papers were selected that had investigated Pulmonary cardiopulmonary resuscitation.

FINDINGS:
Cardiac arrest, the incidence of which has been reported to be over 1,300 people in advanced countries of, and this figure is still rising, is one of the most unfortunate and rare events in pregnant women[9]. This increasing trend can be traced back to two causes: social problems on the one hand and medical advances on the other hand which causes a rise in the number of pregnant women with many infections[10]. There are many causes of cardiac and pulmonary arrest in pregnant women, which are divided into two categories of acute and chronic factors[11]. Given the low age of the majority of pregnant women, acute factors play a more important and common role than chronic ones and the patient’s response to the conducted medical actions is more effective[12]. The most common causes of cardiac and respiratory arrest in pregnant mothers include severe uterine bleeding, amniotic fluid embolism, air and thrombotic agents, increased blood pressure, eclampsia, and brain and liver complications[13]. In case of surgery and requiring general anesthetic, problems with chest, aspiration, and intubation food can also be the causes of cardiac arrest in pregnant mothers[14]. Side effects such as heart rhythm disorders and pulmonary edema usually arise in the context of old heart disease and follow physiological changes in the cardiovascular and pulmonary causes which, unless treated timely and correctly, may lead to cardiac arrest.

DISCUSSION AND CONCLUSION:
In case of cardiac arrest, ventilation of pregnant mothers is initially performed by mask and bag valve mask and the oxygen core[15]. If additional ventilation is needed, intubation of the trachea should be done as soon as possible and the ventilation must continue through the tracheal tube and bag valve mask; finally, in case of prolonged cardiac and respiratory difficulty, long-term ventilation can be used[16]. Finally, a 100-time per minute cardiac massage is required, with massage to ventilation ration of 2:15 prior to chip intubation and 1:1 after the placement of chip intubation; the pressure-to-pressure ratio must be 1:1. There is no specific defect and electrical shock in patients with unilateral ventricular tachycardia and ventricular fibrillation, and if required, even 400 Jules from the defibrillator Power should be used[17]. Adverse drug reactions in pregnant mothers and placenta and embryo hemorrhage should be considered, but in general, pulmonary heart disease drugs are not contraindicated[18]. Electrocardiogram should be monitored as soon as possible after the initial therapeutic treatment in order to determine the type of cardiac arrhythmias; it must be re-implemented after diagnosis and prescribing required treatment[19]. Th majority of side effects, such as fracture of the ribs, cartilage congestion, bleeding of the thoracic and pleura and pericardium, and rupture of the internal organs, such as the liver and the spleen and the uterus, are common among the adults. Hypoxia, increased carbon dioxide, acidosis and the aspiration of the contents of the stomach are more prevalent among pregnant mothers, which will be reduced by their rapid and successful recovery[20]. What pregnant women uniquely experience in this regard are related to the presence
of embryos and fetal complications. Fetal side effects include drug poisoning, decreased uterine pairing, acidosis, hypoxia, and fetal distress resulting from late and unsuccessful relapses, injections of drugs, and pulmonary heart disease. An electric shock causes transient disturbances in the heart rhythm of the fetus, which will quickly resolve if the blood supply and oxygenation of the fetus improve.

REFERENCES: