Abstract

Amniotic Fluid Embolism is a catastrophic complication in obstetrics. A 27-year old female developed cardiac arrest two hours after undergoing a Caesarean section. After an hour of CPR, the patient was taken to the operating room and placed on cardiopulmonary bypass. Due to brisk hemorrhage from the uterus and the development of DIC, a total abdominal hysterectomy was also performed. Large amounts of friable tissue and thrombus were retrieved from the pulmonary arteries. The patient was successfully weaned from bypass and was discharged from the hospital 13 days after this surgery. This presentation will document this very interesting case and review the literature on amniotic fluid embolism.

Introduction

Amniotic Fluid Embolism is a rare and catastrophic complication in obstetrics. This malady has a mortality rate of 86%, and is estimated to be responsible for 9% of all maternal deaths.

The first reported case of Amniotic Fluid Embolism was published by Meyer in 1926. Attwood, in 1979, suggested that Matthew Bailie may have described the first case in an autopsy report in 1825.

This author conducted an extensive review of papers listed in the reference section, and would suggest the reader might find interesting information by also reviewing these authors' excellent papers on Amniotic Fluid Embolism.

The classical symptoms of Amniotic Fluid Embolism are respiratory failure, cyanosis, cardiovascular collapse and hemorrhage. In those patients surviving the first hour of this condition, DIC will usually develop.

Treatment has generally been supportive in nature. Cryoprecipitate therapy has most recently been suggested as an alternative treatment.

In this case presentation, total cardiopulmonary bypass was used in a classic case of Amniotic Fluid Embolism

Pre-Bypass Events

0630 - 27--year old female admitted to hospital for Caesarean
arteries or thrombus of the coronary arteries or veins. The aorta
was normal with no evidence of dissection. The main and
proximal branches of the pulmonary arteries were inspected and
found normal. A suction catheter was passed far out distal to the
left pulmonary artery and large amounts of friable tissue and
thrombus were retrieved. Multiple passes of small suction
catheters into all of the branches of the pulmonary arteries
produced maximal amounts of embolic tissue.

Conclusion

In a search of the literature on amniotic fluid embolism, this
author found no published reports on the use of
cardiopulmonary bypass as a form of treatment for this
condition.

As a result of this very interesting case, the author suggests
that this is one of those case situations where the patient's
condition warrants consideration for cardiopulmonary bypass.

It is my opinion that this patient was an ideal candidate for
bypass. She was young and had no evidence of other ongoing
disease processes. Most importantly, she had received the
maximum benefits from cardiopulmonary resuscitation. In a
malady of this nature, with such an overwhelming mortality
rate, the use of the heart/lung machine is totally warranted.

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Robert Swain MD for their help and assistance with this case
and report, and the "heart team" at Memorial Hospital, who
routinely "tackle" the difficult cases. This one's for you!

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