



Red Cell Volume Measurements and Acute Blood Loss in High-Risk Newborn Infants

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INTRODUCTION

Vasopressin contributes to vasoconstriction and thirst. These compensatory mechanisms can maintain circulation in the event of small blood loss [1]. Losses above this amount require volume replacement and cannot be physiologically compensated for. If the patient's condition is uncontrolled, prolonged hypoperfusion can lead to shock, cellular dysfunction and eventual loss [2]. Vital signs can be misleading regarding the extent of bleeding, especially in young, healthy animals. Therefore, monitoring tools are very important in evaluating bleeding patients [3]. Heart rate may not reflect the severity of blood loss due to compensatory vasoconstriction and constriction. In general, signs of blood loss include pale mucous membranes, prolonged capillary re-fill time, progressive mental deterioration, tachypnea, hypothermia, poor pulse quality (narrow pulse pressure), and cold extremities and also reflects hypovolemia. Tachycardia often does not occur until serious loss occurs. Colic, sweating, and ileus can also occur in horses with heavy blood loss [4]. Treatment of acute blood loss depends on the type of bleeding. The treatment goals for uncontrolled bleeding (eg, intra-abdominal, uterine artery or pulmonary bleeding) are very different from those for controlled bleeding [5]. Normalization of blood pressure (by increasing cardiac output) is the goal of the treatment of controlled bleeding, whereas hypotensive resuscitation is the approach used to treat uncontrolled bleeding.

DESCRIPTION

The goal of hypotensive resuscitation is to maintain a minimum mean arterial pressure to ensure end-organ perfusion without

promoting blood loss [5]. Normalization of blood pressure should be avoided to prevent exacerbation of bleeding. The optimal blood pressure target for resuscitation of this type of horse is unknown [3]. On the other hand, controlled (stopped or stopped) bleeding is treated more aggressively with fluids, aimed at normalizing blood flow. Internal bleeding, also called bleeding, occurs in the body when a blood vessel is damaged [1]. Very minor bleeding, such as small ruptured blood vessels near the surface of the skin, is common and usually results in only small red patches or minor bruising on the skin [4]. Bleeding itself is not a disease. Bleeding always has an underlying cause. The most common cause of bleeding is trauma. One of the reasons why internal bleeding is dangerous is that the bleeding itself is invisible. Bleeding cuts and wounds on the outside of the body are difficult to ignore [2]. However, it's easy to miss bleeding deep within the body until it begins to cause life-threatening symptoms. Because blood is essential to the functioning of nearly every organ and body tissue, blood loss appears to be unrelated to a variety of causes.

CONCLUSION

Anything that damages the walls of blood vessels can cause bleeding. For minor lacerations, the body can form a clot or plug of protein and red blood cells to seal the broken tissue and stop bleeding. However, larger injuries cannot be stopped by blood clots. That is, blood vessels continue to pump blood to surrounding spaces and organs. Internal bleeding is easier to identify because it is often caused by a specific injury or injury. However, bleeding can also be caused by factors that weaken the walls of blood vessels over time or interfere with the clotting process. These factors include certain medical conditions, medications, and lifestyle.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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