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abstract

Changes in Bone Marrow Harvesting: Transitioning From Bone Marrow Kits to Blood Bags

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Changes in Bone Marrow Harvesting: Transitioning From Bone Marrow Kits to Blood Bags

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Introduction: Bone marrow harvesting is a critical procedure in hematopoietic stem cell transplantation, traditionally performed by using specialized Fresenius bone marrow kits, which were internationally imported. Recent advancements suggest that using blood bags for harvesting can be equally effective, potentially offering a more costefficient alternative and being easily accessible. The study aims to transition from traditional bone marrow harvesting kits to blood collecting bags during the bone marrow harvest procedure.

Methodology: The PDSA cycle was used to change the blood harvesting process. A doctor and a nurse from the AKUH BMT unit attended training at the Armed Forces Bone Marrow Transplant Hospital, Rawalpindi (AFBMTC) to learn about the harvest procedure. Following this, a pilot was done using the blood bags, which proved successful. Based on this success and the team's confidence in the new method, we decided to fully implement the use of blood bags in our procedures. This transition was made smoothly, with ongoing monitoring to ensure continued effectiveness and address any potential issues if observed. Hence, no difference in CD-34 count was observed.

Results: The bone marrow Kit cost is 259,622 RS, and the blood bag is 1600 RS per bag. Initially, the donor average bill was RS 615,028, and after the use of Blood Bags, the average bill reduced to RS 347,978. The average cost reduction in the overall bill is 43.4%.

Conclusion: The use of blood bags decreases patient costs and increases patient satisfaction. It is also easily accessible for use.