

Case Number:	CM15-0136699		
Date Assigned:	07/24/2015	Date of Injury:	01/23/2013
Decision Date:	08/28/2015	UR Denial Date:	06/26/2015
Priority:	Standard	Application Received:	07/14/2015

HOW THE IMR FINAL DETERMINATION WAS MADE

MAXIMUS Federal Services sent the complete case file to an expert reviewer. He/she has no affiliation with the employer, employee, providers or the claims administrator. He/she has been in active clinical practice for more than five years and is currently working at least 24 hours a week in active practice. The expert reviewer was selected based on his/her clinical experience, education, background, and expertise in the same or similar specialties that evaluate and/or treat the medical condition and disputed items/Service. He/she is familiar with governing laws and regulations, including the strength of evidence hierarchy that applies to Independent Medical Review determinations.

The Expert Reviewer has the following credentials:
 State(s) of Licensure: Texas, California
 Certification(s)/Specialty: Family Practice

CLINICAL CASE SUMMARY

The expert reviewer developed the following clinical case summary based on a review of the case file, including all medical records:

This is a 50-year-old male patient, who sustained an industrial injury on 1/23/2013. He reported low back pain with lifting activity. Diagnoses include lumbar spine discopathy, lumbar disc herniations with spondylolisthesis, lumbar radiculopathy. Per the evaluation note dated 1/26/15, he had complaints of significant pain in the low back and lower extremities. The physical examination revealed lumbar muscle tenderness and spasm, numbness and tingling and decreased sensation in the lower extremities with decreased strength, positive straight leg raise test. The plan of care was to schedule a lumbar fusion. Currently, he underwent pre-operative autologous blood collection for a scheduled lumbar fusion with hardware placement. On 6/12/15, the record indicated total estimated blood loss was 300; waste volume was 250 and clear; and blood returned was 150. He has had lumbar MRI on 9/29/2014 and 1/2/2013. Treatments to date include anti-inflammatory, physical therapy, chiropractic therapy. The appeal request was to authorize the Cell saver Machine Rental and Cell saver disposal kit from date of service 6/12/15.

IMR ISSUES, DECISIONS AND RATIONALES

The Final Determination was based on decisions for the disputed items/services set forth below:

Retrospective Cell saver machine rental/Cell saver disposal kit with a dos of 6/12/2015:
 Upheld

Claims Administrator guideline: The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation www.ncbi.nlm.nih.gov.

MAXIMUS guideline: The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation PubMed Intraoperative blood recovery, Waters JH, ASAIO J. 2013 Jan; 59 (1): 11-7.

Decision rationale: Retrospective Cell saver machine rental/Cell saver disposal kit with a dose of 6/12/2015 Allogeneic transfusion, or transfusion of blood banked blood has been associated with a litany of complications for the recipient. These complications plus associated cost has led to the development of a concept called "patient blood management," which recognizes that allogeneic transfusion may be necessary; however, all effort should be expended at minimizing its need. Central to reducing or eliminating the need for allogeneic transfusion is the process called "blood salvage." This process involves collection of shed surgical blood, its washing and filtering, and its re-administration. This process can take place in the intraoperative or postoperative period. This article describes the technology, how it works, and how to maximize the utility of the system. Departments of Anesthesiology and Bioengineering, [REDACTED], [REDACTED] for Regenerative Medicine, [REDACTED], USA. [REDACTED] PubMed. The contemporary approach to the care of Jehovah's witnesses. Hughes DB, Ullery BW, Barie PSJ Trauma. 2008; 65 (1): 237 BACKGROUND: Jehovah's Witnesses are widely known for their prohibition on the acceptance of blood transfusion. Such refusal serves as a potential obstacle to optimal therapeutic intervention among critically injured Jehovah's Witnesses. As such, care of these patients requires an aggressive and multidisciplinary approach to therapy. METHODS: A review of the pertinent English language literature. RESULTS: Jehovah's Witnesses exercise the right of any adult with capacity to refuse medical treatment and often carry advance directive cards indicating their incontrovertible refusal of blood. Despite their belief regarding transfusion, [REDACTED] do not have a higher mortality rate after traumatic injury or surgery. Transfusion requirements are often overestimated. Increased morbidity and mortality is rarely observed in patients with a hemoglobin concentration >7 g/dL, and the acute hemoglobin threshold for cardiovascular collapse may be as low as 3 g/dL to 5 g/dL. There are many modalities to treat the Jehovah's Witness patient with acute blood loss. Treatment with recombinant human erythropoietin, albumin, and recombinant activated Factor VIIa have all been used with success. Autologous autotransfusion and isovolemic hemodilution can also be used to treat patients who refuse transfusion. Hemoglobin-based oxygen carriers may play a future role as intravascular volume expanders in lieu of transfusion of red blood cell concentrates. CONCLUSION: There are many treatment modalities available to assist in the care of Jehovah's Witness patients, especially since their beliefs on the intricacies of the Blood Ban appear to be in flux. Department of Surgery, Division of Critical Care and Trauma, [REDACTED], USA. PubMed TI Cost-effectiveness of cell salvage and alternative methods of minimising perioperative allogeneic blood transfusion: a systematic review and economic model. AUDavies L, Brown TJ, Haynes S, Payne K, Elliott RA, McCollum CSO Health Technol Assess. 2006 Nov; 10(44): iii-iv, ix-x, 1-210. OBJECTIVES: To compare patient outcomes, resource use and costs to the NHS and NHS Blood Transfusion Authority (BTA) associated with cell salvage and alternative methods of minimising perioperative allogeneic blood transfusion. DATA SOURCES: Electronic databases covering the period 1996-2004 for systematic reviews and 1994-2004 for economic evidence. CONCLUSIONS: The available evidence indicates that cell salvage may be a cost-effective method to reduce exposure to allogeneic blood transfusion. However, ANH may be more cost-effective than cell salvage. The results of this analysis are subject to the low quality and reliability of the data used and the use of indirect comparisons. This may affect the reliability and robustness of the clinical and economic results. There is a

need for further research that includes adequately powered high-quality RCTs to compare directly various blood transfusion strategies. These should include measures of health status, health-related quality of life and patient preferences for alternative transfusion strategies. Observational and tracking studies are needed to estimate reliably the incidence of adverse events and infections transmitted during blood transfusion and to identify the lifetime consequences of the serious hazards of transfusion on mortality, health status and health-related quality of life. ADHealth Economics Research, [REDACTED]. The intraoperative cell salvage machine (commonly referred to as a cell saver) separates, washes, and concentrates salvaged red blood cells (RBCs). General recommendation of use of cell saver machine includes avoidance of allogeneic transfusion, in surgical procedures having a high likelihood of significant blood loss (>1000 mL), greater number of units available compared with other autologous blood conservation techniques, cross match compatible blood is unobtainable, intraoperative blood salvage may also be acceptable to some Jehovah's Witnesses, who will not accept allogeneic blood. The presence of any of the above criteria, that would require a Cell saver machine, was not specified in the records provided. The medical necessity of Retrospective Cell saver machine rental/Cell saver disposal kit with a dos of 6/12/2015 was not fully established for this patient. The request is not medically necessary.