

Nursing Experience in a Case of Membranous Nephropathy Complicated by Acute Myocardial Infarction and Lower Extremity Arterial Embolism

Authors: Zhang Yue, Chen Shangyuan, Li Guangzong, Li Guangzong

Date: 2023-09-30T00:00:00+00:00

Abstract

We report the nursing care of one case of membranous nephropathy complicated by acute myocardial infarction and lower extremity arterial embolism. Patients with membranous nephropathy are prone to hypercoagulable states, which constitute a risk factor for lower extremity arterial thrombosis. This patient received high-quality nursing care throughout the entire course, which enabled optimal treatment and reduced complications. These nursing measures merit clinical promotion and application.

Full Text

Nursing Experience in a Case of Membranous Nephropathy Complicated by Acute Myocardial Infarction and Lower Extremity Arterial Embolism

Yue Zhang¹, Shangyuan Chen², Guangzong Li²

¹Department of Nursing, Dongfang Hospital, Beijing University of Chinese Medicine, Beijing 100078

²Department of Peripheral Vascular Disease, Dongfang Hospital, Beijing University of Chinese Medicine, Beijing 100078

Abstract

This report describes the nursing care for a patient with membranous nephropathy complicated by acute myocardial infarction and lower extremity arterial embolism. Patients with membranous nephropathy are prone to developing a hypercoagulable state, which represents a significant risk factor for lower extremity arterial thrombosis. Through the implementation of comprehensive,

high-quality nursing care throughout the entire treatment course, this patient achieved optimal therapeutic outcomes with reduced complications. These nursing interventions warrant broader clinical application and promotion.

Keywords: Membranous nephropathy; Lower extremity artery; Embolism; Nursing care

Acute lower extremity arterial embolism is characterized by sudden onset and rapid disease progression, potentially leading to amputation if not treated promptly. Patients endure considerable physical and psychological suffering, often experiencing severe psychological distress. With advances in therapeutic approaches and improvements in nursing models, the incidence of complications has decreased while patient recovery and psychological rehabilitation have been enhanced. Correct and timely nursing interventions are crucial for ensuring successful surgical outcomes [7]. The treatment results from this case demonstrate that providing patients with comprehensive, high-quality nursing care can significantly improve patient satisfaction and comfort while reducing complications, enabling optimal treatment outcomes. These nursing measures merit wider clinical application and promotion.

The primary risk factors for acute lower extremity arterial embolism include hyperviscosity, smoking, family history of cardiac disease, atrial fibrillation, and anemia [8,9]. In membranous nephropathy, circulating antibodies react with intrinsic glomerular antigens to form in situ immune complexes [6], leading to significant alterations in blood cholesterol and plasma proteins, deficiency of antithrombin III or reduced fibrinolytic activity, increased platelet aggregation, and elevated procoagulant substances, thereby inducing a hypercoagulable state. While renal biopsy remains the primary diagnostic method for membranous nephropathy [10], some patients are unable to undergo biopsy due to various reasons, creating diagnostic challenges that subsequently impact treatment [11]. This article explores the predictive value of antithrombin III and platelet membrane glycoprotein CD62P for thromboembolic risk. Currently, serum anti-phospholipase A2 receptor antibodies (anti-PLA2R antibodies) are being applied for diagnosing membranous nephropathy, providing theoretical reference for screening, diagnosis, monitoring, and prognosis, and offering partial data support for laboratory diagnosis of membranous nephropathy [12]. Thromboembolism represents a common and severe complication of idiopathic membranous nephropathy [13] that jeopardizes patient safety and significantly impacts prognosis and future quality of life, underscoring the critical importance of thromboembolism prevention.

References

- [1] Yan Zhenyu, Mai Chunyang, Hao Yuhua. Analysis of biopsy pathological characteristics in elderly patients with kidney disease [J]. Chinese Journal of Gerontology, 2017, 37(1): 169-171.
- [2] Guo Yu, Zhao Zongfeng, Xu Dan, et al. Correlation between M-type phos-

- pholipase A2 receptor and human leukocyte antigen gene single nucleotide polymorphisms and idiopathic membranous nephropathy in Uyghur population [J]. Journal of Clinical and Practical Diagnosis and Treatment, 2017, 31(1): 14-18.
- [3] Fang Ling, Gu Xiangming, Zhou Zehong, et al. Application of ELISA detection of serum anti-phospholipase A2 receptor antibodies in membranous nephropathy [J]. International Journal of Laboratory Medicine, 2017, 38(4): 450-451, 454.
- [4] Cai Zhen, Wang Lei, Zhu Xianggang, et al. Analysis of a case of membranous nephropathy complicated with hypothyroidism developing acute kidney injury after human serum albumin administration [J]. Chinese Journal of Clinicians, 2017, 45(2): 116-118.
- [5] Ma Leilei, Huang Xiaotong, Wang Mingzhe, et al. Clinical research progress of PLA2R antibodies in idiopathic membranous nephropathy [J]. Chinese Journal of Integrated Traditional and Western Nephrology, 2017, 18(1): 77-79.
- [6] Thrombosis in Nephrotic Syndrome[J] Amoroso, Rosario Cianci. Semin Thromb Hemost. 2013
- [7] Ma Rongyan. Application effect of comprehensive high-quality nursing in acute lower extremity arterial embolism [J]. Chinese Journal of Modern Drug Application, 2016, 10(5): 233-235.
- [8] Zhe L, Weibo L, Haitao Z, et al. Clinical features of anemia in membranous nephropathy patients: a Chinese cohort study.[J]. Renal failure, 2023, 45(1).
- [9] Grace Y H C, Catherine M, H T L, et al. The clinicopathologic spectrum of membranous nephropathy with lupus-like features.[J]. Nephron, 2023.
- [10] Liu Shasha, Sang Xiaohong, Liu Zhen. Research progress in diagnosis and treatment of idiopathic membranous nephropathy [J]. Journal of Clinical and Practical Diagnosis and Treatment, 2017, 31(1): 82-84.
- [11] Zhang Xiaodan, Deng Yueyi. Analysis of experience in treating membranous nephropathy with traditional Chinese medicine [J]. Modern Journal of Integrated Traditional Chinese and Western Medicine, 2017, 26(1): 112-114.
- [12] Peng Suying, Wang Yujie, He Yu, et al. Establishment and identification of a cationized bovine serum albumin-induced membranous nephropathy rat model [J]. Shandong Medical Journal, 2016, 56(48): 36-38.
- [13] Zhang Yarui, Shi Zhan, Li Mengge, et al. Study of antithrombin III and membrane glycoprotein CD62P on embolism risk in idiopathic membranous nephropathy [J]. China Medicine and Pharmacy, 2023, 13(14): 33-36+67.

Note: Figure translations are in progress. See original paper for figures.

Source: ChinaXiv –Machine translation. Verify with original.