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ANTENATAL PREGNANT PATIENT WITH SYSTEMIC LUPUS ERYTHEMATOSUS AND LUPUS NEPHRITIS POSTED FOR EMERGENCY SUCTION AND EVACUATION: A CASE REPORT

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ABSTRACT Systemic Lupus Erythematosus (SLE) is a chronic multisystem autoimmune disease that presents significant anaesthetic challenges because of multisystem involvement including renal, cardiovascular, respiratory, hematological, and neurological manifestations. We report the anaesthetic management of a 22-year-old gravida 2 abortion 1 (G2A1) patient at 7 weeks and 4 days gestation with overt diabetes mellitus and lupus nephritis posted for emergency suction and evacuation. Preoperative assessment revealed mild anemia, borderline thrombocytopenia, prolonged activated partial thromboplastin time (APTT), and chronic immunosuppressive therapy. Considering the possibility of coagulopathy and renal involvement, general anaesthesia using total intravenous anaesthesia (TIVA) was planned. The intraoperative period remained uneventful with stable hemodynamics, minimal blood loss, and successful postoperative recovery. This case highlights the importance of meticulous perioperative evaluation and individualized anaesthetic planning in patients with SLE undergoing emergency procedures.

KEYWORDS : Systemic Lupus Erythematosus, Lupus Nephritis, Anaesthesia, Suction and Evacuation, Pregnancy, Total Intravenous Anaesthesia

INTRODUCTION

Systemic Lupus Erythematosus (SLE) is a chronic autoimmune disorder characterized by the production of autoantibodies against nuclear and cytoplasmic antigens, resulting in immune complex deposition and multisystem inflammation [1,4,9]. The disease predominantly affects women of reproductive age and may involve the skin, kidneys, joints, hematological system, cardiovascular system, and central nervous system [4,8,11].

Lupus nephritis is one of the most serious complications of SLE and occurs due to immune complex deposition in the glomeruli. Pregnancy in patients with SLE poses additional perioperative risks due to altered immune status, renal dysfunction, coagulation abnormalities, and the effects of chronic immunosuppressive therapy [7,11]. Anaesthetic management requires careful preoperative evaluation, optimization of systemic status, and appropriate choice of anaesthetic technique [2,3,12].

Case Report

A 22-year-old female, gravida 2 abortion 1 (G2A1), at 7 weeks and 4 days gestation, was posted for emergency suction and evacuation. She was a known case of Systemic Lupus Erythematosus with lupus nephritis, overt diabetes mellitus, and hypothyroidism. She was on regular treatment with hydroxychloroquine, azathioprine, and thyroxine.

On preoperative evaluation, the patient was conscious, oriented, and hemodynamically stable. Her blood pressure was 120/80 mmHg, heart rate 96/min, respiratory rate 16/min, and oxygen saturation 98% on room air. Height was 158 cm and weight was 61 kg.

Airway assessment showed adequate mouth opening, Mallampati Grade II, normal neck movements, and normal spine examination, suggesting an anticipated easy airway.

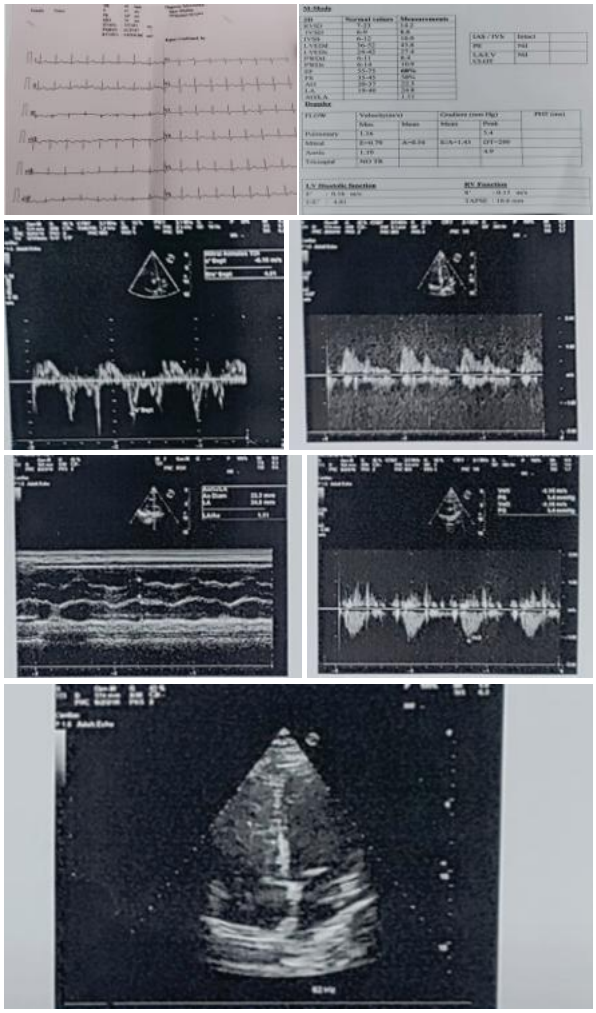
Laboratory investigations revealed hemoglobin 10.4 g/dL, white blood cell count 4.9×10^9/L, platelet count 1.2 lakh/mm^3, fasting blood sugar 115 mg/dL, and HbA1c 7.6%.

Renal function tests were within normal limits with serum urea 20 mg/dL and creatinine 0.7 mg/dL. Electrolytes were normal.

Coagulation profile showed prolonged APTT of 65.5 seconds with INR 1.

Viral markers were negative and blood group was O positive.

Ecg Normal sinus rhythm , Echo -EF 68%, Normal study



Considering the prolonged APTT, borderline thrombocytopenia, and possible coagulopathy, regional anaesthesia was avoided. The patient was classified as ASA III-E and planned for general anaesthesia with perioperative steroid coverage.

The patient was kept nil per oral for 8 hours according to ASA fasting guidelines. After obtaining informed consent, intravenous access was secured and standard ASA monitors were attached in the operating room.

Premedication included injection glycopyrrolate 0.2 mg IV and injection midazolam 1 mg IV. Anaesthesia was induced with injection fentanyl 100 mcg IV and injection propofol 120 mg + additional 20 mg IV. Injection tranexamic acid 1 g slow IV was administered intraoperatively. Approximately 300 mL of normal saline was infused during the procedure.

The surgery lasted approximately 30 minutes. Hemodynamic parameters remained stable throughout the intraoperative period. Blood loss was minimal (approximately 15 mL). The patient was shifted to the post-anaesthesia care unit for monitoring. Recovery was uneventful and the patient was later discharged from the obstetric ward.

DISCUSSION

Systemic Lupus Erythematosus poses several anaesthetic challenges because of multisystem involvement. Airway management may be difficult due to temporomandibular joint arthritis, cervical spine involvement, or laryngeal edema. Respiratory complications such as pleural effusion and interstitial lung disease may reduce oxygen reserve [12,14].

Cardiovascular manifestations include pericarditis, myocarditis, arrhythmias, and hypertension. Renal involvement in lupus nephritis can alter drug metabolism and excretion, requiring careful titration of anaesthetic agents and avoidance of nephrotoxic drugs [6,14].

Hematological abnormalities including anemia, thrombocytopenia, and antiphospholipid syndrome increase perioperative risk. In the present case, prolonged APTT and borderline thrombocytopenia made regional anaesthesia relatively contraindicated. Therefore, general anaesthesia using intravenous agents was chosen [2,3,13].

Stress-dose steroids may be required in patients on chronic steroid therapy to prevent adrenal insufficiency. Careful fluid management and maintenance of hemodynamic stability are essential to preserve renal perfusion [6,14].

This case emphasizes the importance of individualized anaesthetic planning, multidisciplinary coordination, and vigilant perioperative monitoring in pregnant patients with SLE [7,11].

CONCLUSION

Successful anaesthetic management of patients with Systemic Lupus Erythematosus requires thorough preoperative assessment and careful perioperative planning because of multisystem involvement. general anaesthesia can be safely administered in patients with lupus nephritis and coagulation abnormalities undergoing emergency suction and evacuation. Early recognition of organ involvement and appropriate anaesthetic modifications contribute significantly to favorable perioperative outcomes [2,14].

REFERENCES

1. Hahn BH. Systemic lupus erythematosus. In: Harrison's Principles of Internal Medicine. 21st ed. McGraw-Hill; 2022.
2. Barash PG, Cullen BF, Stoelting RK. Clinical Anaesthesia. 9th ed. Wolters Kluwer; 2023.
3. Morgan GE, Mikhail MS. Clinical Anaesthesiology. 7th ed. McGraw-Hill; 2022.
4. D'Cruz DP, Khamashta MA, Hughes GR. Systemic lupus erythematosus. Lancet. 2007;369:587-596.
5. Wallace DJ, Hahn BH. Dubois' Lupus Erythematosus and Related Syndromes. 9th ed. Elsevier; 2019.
6. Kasitanon N, Fine DM, Haas M, Magder LS, Petri M. Estimating renal survival in patients with lupus nephritis. Kidney International. 2006;70(8):1401-1407.
7. Lateef A, Petri M. Managing lupus patients during pregnancy. Best Practice & Research Clinical Rheumatology. 2013;27(3):435-447.
8. Mok CC, Lau CS. Pathogenesis of systemic lupus erythematosus. Journal of Clinical Pathology. 2003;56(7):481-490.
9. Rahman A, Isenberg DA. Systemic lupus erythematosus. New England Journal of Medicine. 2008;358:929-939.
10. Hochberg MC. Updating the American College of Rheumatology revised criteria for classification of systemic lupus erythematosus. Arthritis and Rheumatism. 1997;40(9):1725.
11. Kaul A, Gordon C, Crow MK, et al. Systemic lupus erythematosus. Nature Reviews Disease Primers. 2016;2:16039.
12. Kaye AD, Kucera IJ. Anaesthetic considerations in autoimmune diseases. Middle East Journal of Anesthesiology. 2014;22(6):579-590.
13. Butterworth JF, Mackey DC, Wasnick JD. Morgan and Mikhail's Clinical Anesthesiology. 7th ed. McGraw-Hill Education; 2022.
14. Stoelting RK, Hines RL, Marschall KE. Stoelting's Anesthesia and Co-Existing Disease. 8th ed. Elsevier; 2021.
15. Levy DM, Kamphuis S. Systemic lupus erythematosus in children and adolescents. Pediatric Clinics of North America. 2012;59(2):345-364.