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# Analgosedation in the electrophysiology laboratory: nursing roles and multidisciplinary safety

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Analgosedation has become an integral part of modern electrophysiology (EP), particularly with the rapid adoption of pulsed field ablation (PFA). Although PFA shortens ablation time, pulse delivery produces brief but intense painful and neuromuscular stimulation, making patient comfort, immobility, respiratory stability, and rapid recovery important procedural goals. Contemporary practice therefore increasingly considers sedation a multidisciplinary workflow rather than an isolated pharmacological intervention.

Propofol, short-acting opioids, midazolam, dexmedetomidine and other titratable agents are used according to patient characteristics, procedure type, PFA platform, and institutional protocols.[1] Their combined use may improve procedural tolerance but requires continuous assessment of consciousness, ventilation, oxygenation and hemodynamics, with immediate readiness for airway and circulatory support. Recent real-world data demonstrate the importance of trained EP teams. In the EUPORIA registry of 1,233 PFA procedures, 80% were performed under deep sedation; procedure time was shorter than with general anesthesia (median 51 vs 75 min), without a difference in serious adverse events.[2] In a Danish nationwide cohort of 1,269 patients, 52% underwent deep sedation managed by EP staff, primarily EP nurses; unexpected anesthesiology support was required in only 0.2% of these cases.[3] These results underline that safety depends not only on drug selection but on structured protocols, team training, monitoring, airway preparedness, and clear escalation pathways.

The EP nurse has a central role before, during and after sedation: patient preparation, equipment and medication readiness, continuous clinical and physiological surveillance, early recognition of deterioration, airway-support measures within defined competencies, communication, and coordinated escalation. As EP procedures become faster but technologically more complex, standardized sedation protocols and multidisciplinary simulation training should become core competencies of the contemporary EP laboratory.

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