INTRAOPERATIVE IDENTIFICATION OF GGOS

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The identification of ground-glass opacities (GGOs) during lung cancer surgery remains challenging due to their heterogeneous biological behavior and lack of well-defined surgical criteria. However, recent advancements in lung cancer screening, particularly in China, have significantly increased the detection rate of GGOs, marking a crucial turning point in the field [1]. These advancements underscore the need for standardized surgical approaches. Current studies, including JCOG0804 and JCOG0802/WJOG4607L, among others, demonstrate that segmentectomy offers superior outcomes compared to lobectomy for early-stage lung cancer[2–4]. This suggests wedge resection and segmentectomy should be the standard surgical procedure for small peripheral non-small cell lung cancer (NCCN, T1abN0M0)[5,6]. Surgical localization techniques such as anatomical localization, image-guided positioning, CT guidance, computer navigation, and bronchoscopic guidance are crucial for accurate intraoperative identification of GGOs[7–9]. Each localization technique has its advantages and disadvantages. A personalized approach to surgical planning and localization is essential to ensure targeting the nodule with safe surgical margins and successful outcomes for patients with GGOs. This abstract summarizes key findings from recent research and emphasizes the importance of precise preoperative planning and intraoperative identification for optimal surgical treatment of GGOs.

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