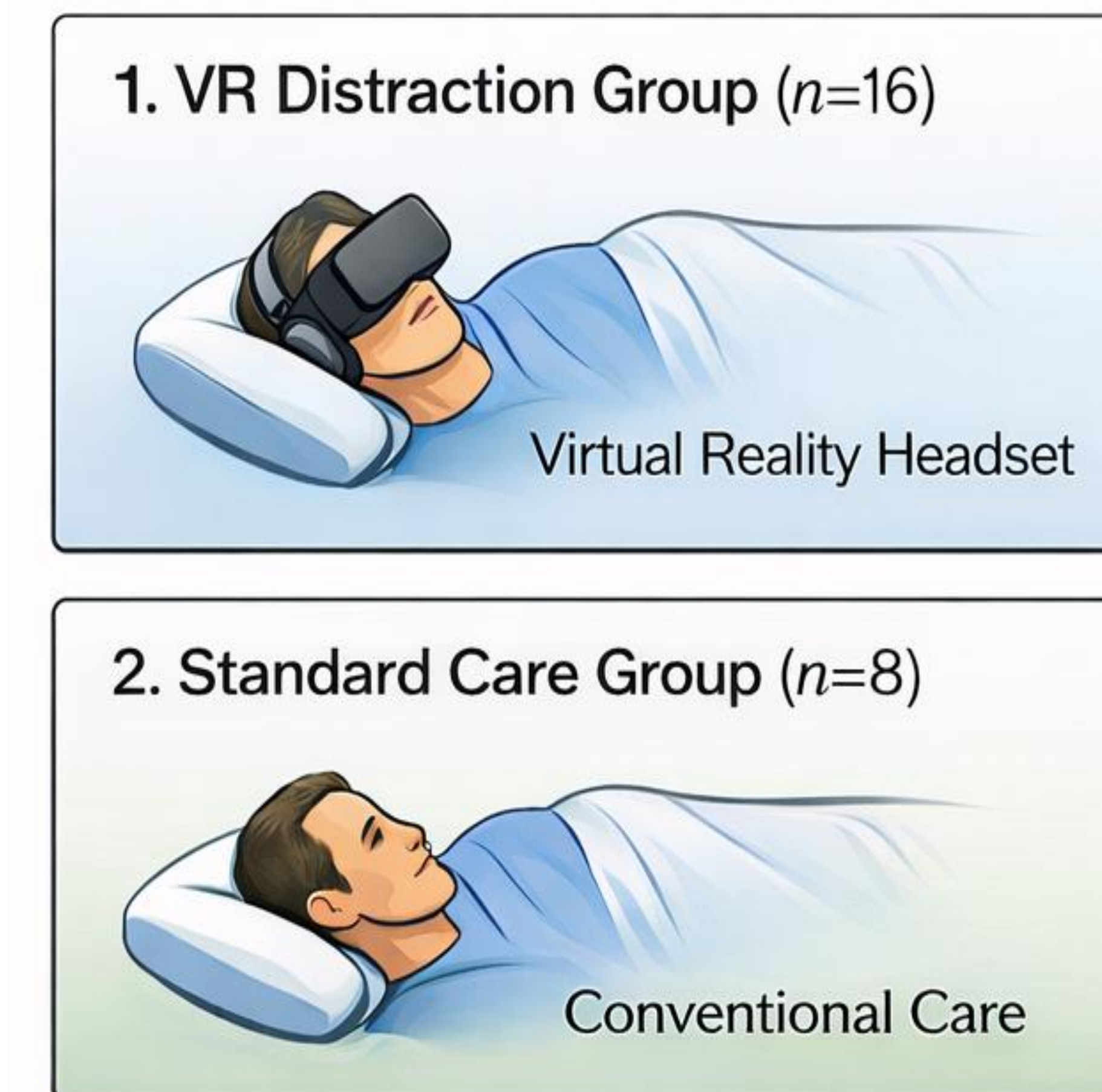


FEASIBILITY OF VIRTUAL REALITY DISTRACTION DURING ENDOSCOPIC MUCOSAL RESECTION (EMR) AND ENDOSCOPIC SUBMUCOSAL DISSECTION (ESD) FOR COMPLEX COLORECTAL POLYPS.

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- **Introduction:** Complex colorectal polypectomy is often associated with prolonged procedures and patient discomfort. This study is to evaluate the feasibility and efficacy of VR distraction during complex polypectomy.
- **Methods:**
 - This is a prospective, quasi-randomised study
 - Patients undergoing endoscopic mucosal resection (EMR) or endoscopic submucosal dissection (ESD) under conscious.
 - VR distraction VS standard care.
 - Pre- and post-procedure anxiety state-trait anxiety inventory score (STAI-trait), pain scores, sedation use, physiological changes, patient-reported outcomes, and endoscopist views were assessed.
- **Results:**
 - 24 patients were included (VR, n=16; control, n=8).
 - No significant difference in age (63.2 vs 62.7 years), sex distribution, lesion size (28.1 vs 30.1 mm), procedure type (ESD 56% vs 50%).
 - Average pain during the procedure was (VR: 4.1 vs Non-VR 3.6)
 - high satisfaction in both groups (VR: 8.4 vs Non-VR 8.9/10, $p=0.415$).
 - Willingness to repeat the procedure (VR: 93.7 vs non-VR 75%, ($p=0.249$)).
 - There was no significant difference in medication use (VR: 2.0 vs 2.5 mg midazolam, $p=0.350$; VR: 59 vs 62 μg fentanyl, $p=0.439$).
 - Changes in vital signs were minimal and similar between groups.
 - Most patients used VR (56%) for >70% of the procedure (56%)
 - Reasons for discontinuation including discomfort, boredom, or prone positioning.
 - One patient in VR group experienced mild nausea.
 - Endoscopist-reported pain scores and satisfaction ratings were comparable with no significant difference.
 - Endoscopist willingness to repeat under the same conditions was 87.5% in VR vs 100% in control ($p=0.364$).



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- 🔄 **Willingness to repeat the procedure**
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- 💉 **No significant difference in medication use:**
 - VR: 2.0 vs 2.5 mg midazolam, $p=0.350$
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- 🛡️ **Changes in vital signs were minimal and similar between groups**
- 🎧 **Most patients used VR for >70% of the procedure (56%)**

- **Conclusion:** VR distraction during complex polypectomy is feasible, and well-tolerated, with high patient satisfaction and willingness to repeat the procedure. While no significant reductions in pain or sedation use were demonstrated, the study highlights VR as a promising adjunct for patient experience during advanced endoscopy