Using Virtual Reality to Teach Bladder Exstrophy Repair

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• **Surgical training**
  – Live observation of surgeries
  – Limited by OR space
  – Inefficient for rare conditions

• **Bladder exstrophy**
  – 2.15 per 100,000 live births
  – Complex surgical treatment

• **Virtual Reality (VR)**
  – Immersion in different environment
  – Additional layers (audio, visual) enhance learning
  – Multiple users simultaneously

*Figure 1. Visiting pediatric urologists from China use EpiCenter VR headsets to view live surgeries*
• 14 visiting pediatric urologists used EpiCenter VR headsets to view a live bladder exstrophy repair
• 360-degree view in OR
• Received multiple layers of info (radiology images, audio descriptions)
• Use of VR in urology training is feasible, and its application is being explored further

Figure 2. Surgical training using VR allows participants to view presentations, receive audio information, and zoom in