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Applications and outcomes of trans-cervical robotic Surgery

Robotic head and neck surgery refers to the use of advanced robotic technology to perform surgical procedures in the head and neck region. This technology allows for more precise movements and better visualization of the surgical area, which can lead to improved outcomes and shorter recovery times for patients.

Robotic head and neck surgery is typically used to treat conditions such as benign tumors and cancers in the head and neck region. The robotic system consists of a console where the surgeon sits and controls the robotic arms that hold the surgical instruments. The surgeon uses a computerized 3D visualization system to guide the instruments and perform the surgery.

Robotic surgery can offer several advantages over traditional surgical techniques, including:

1. **Greater precision:** The robotic system allows for very precise movements and allows the surgeon to access hard-to-reach areas.
2. **Less invasive:** Robotic surgery typically involves smaller incisions than traditional surgery, which can result in less scarring and a faster recovery time.
3. **Reduced risk of complications:** Robotic surgery can reduce the risk of complications such as infection and bleeding, as the surgical instruments can be manipulated with greater precision.

Robotic head and neck surgery has been used successfully in the treatment of a variety of head and neck conditions, including tumors of the oropharynx, larynx, and hypopharynx (mainly Transoral Robotic Surgery, TORS). Nowadays, Robotic application has been expanded into Neck dissection, Thyroidectomy, SMG surgery, Parotidectomy, and Total/Partial Laryngectomy in the head and neck area.

However, it is important to note that not all patients are suitable candidates for robotic surgery and the decision to use this technology should be made on a case-by-case basis by a trained surgeon.

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经颈机器人手术的应用与效果

机器人头颈部手术是指使用先进的机器人技术来进行头颈部的外科手术。这种技术可以实现更精确的动作和更好的手术区域可视化，从而提高手术效果，缩短患者的恢复时间。

机器人头颈部手术通常用于治疗头颈部的良性肿瘤和癌症等疾病。机器人系统包括一个控制台，外科医生坐在那里，控制放置手术器械的机器人手臂。外科医生使用一个计算机化的三维可视化系统来引导器械并进行手术。

与传统的外科技术相比，机器人手术可以提供几个优势，包括：

1. 精度更高：机器人系统允许非常精确的运动，并允许外科医生进入难以触及的区域。
2. 侵入性更小：机器人手术通常涉及比传统手术更小的切口，这可能会导致更少的疤痕和更快的恢复时间。
3. 减少并发症的风险：机器人手术可以减少并发症的风险，如感染和出血，因为手术器械可以被更精确地操纵。

机器人头颈部手术已成功用于治疗各种头颈部疾病，包括口咽部、喉部和下咽部的肿瘤（主要是经口机器人手术，TORS）。现在，机器人的应用已经扩展到头颈部的颈部解剖、甲状腺切除术、SMG手术、腮腺切除术和全/部分喉切除术。

然而，需要注意的是，并不是所有的病人都适合做机器人手术，使用这种技术的决定应该由训练有素的外科医生根据具体情况作出。