

3D imaging and urology: Why 3D reconstruction will be mandatory before performing surgery.

[Lachkar AA](#)¹, [Soler L](#)², [Diana M](#)², [Becmeur F](#)¹, [Marescaux J](#)².

Author information

Abstract in [English](#), [Spanish](#)

We relate a single-center experience in virtual surgical planning to demonstrate interests and perspectives in pediatric urology. **METHOD:** From 2004 to April 2017, 4 patients were analyzed before intervention at our institution. All patients had undergone a low dose CT scan. The acquisition was then treated by a surface rendering software. Pre-, per- and post-operative outcome were retrospectively collected. **RESULTS:** 4 patients were operated on from 2004 to April 2017: two for oncological pathologies and two for congenital malformations. Mean age at intervention was 61 months (21-156 months). Two interventions were performed laparoscopically with one conversion. Mean operative time was 135 min (80-180 min). There were no complications. **CONCLUSION:** 3D surgical planning should be mandatory in pediatric urology to perform the safest, the most accurate and effective surgery as possible.

KEYWORDS: Cirugía guiada por la imagen; Cirugía pediátrica; Image-guided surgery; Pediatric surgery; Planificación quirúrgica virtual; Realidad Virtual; Virtual reality; Virtual surgical planning

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