#AM19-0768


**Objectives:** To compare length of hospital stay, transfusion rates, and re-intervention rates for transurethral resection of the prostate (TUR-P), open prostatectomy (OP), and laser therapy (LT) used for surgical treatment of benign prostatic obstruction (BPO).

**Materials & methods:** The D.V.P.Z. is an organization, in which clinical data of prostatic diseases from 2 university clinics, 19 treatment clinics, 3 private clinics and 270 office-based urologists are collected in order to document the quality and type of cross-sectoral and interdisciplinary treatment. Data on diagnostics, therapy and course of disease are recorded web-based. The analysis includes datasets from 2005-2017.

**Results:** Of 10,420 patients, 8,389 (80.5%) were treated with TUR-P, 1,334 (12.8%) with OP, and 697 (6.7%) with LT. Patients characteristics are shown in Tab.1. Median length of hospital stay was 6 days (IQR: 4-7) for TUR-P, 9 days (IQR: 7-11) for OP, and 5 days (IQR: 4-6) for LT (p<0.001) (Fig.1). Transfusion- and Re-Intervention rates are shown in Fig.2. OP had a significantly higher risk for transfusions than TUR-P (OR: 2.44; 95% CI 1.74-3.41; p<0.001) and LT (OR: 3.32; 95% CI 1.56-7.01; p<0.001). Transfusion rates were not significantly different between TUR-P versus LT (OR: 1.36; 95% CI 0.66-2.79; p=0.51). Risk for a hospital stay ≥7 days was higher for OP versus TUR-P (OR: 7.25; 95% CI 6.27-8.36; p<0.001) and LT: (OR: 17.89; 95% CI 14.12-22.65; p<0.001); and higher for TUR-P versus LT: (OR: 2.47; 95% CI 2.03-3.01; p<0.001). No differences were seen in re-intervention rates between TUR-P versus OP (OR: 1.14; 95% CI 0.88-1.48; p=0.34) and LT (OR: 1.39; 95% CI 0.96-2.02; p=0.8), and between OP versus LT (OR: 1.22; 95% CI 0.79-1.89; p=0.39).

**Conclusions:**

* The D.V.P.Z. database provides health service research data on the surgical treatment of BPO.

* OP was associated with higher transfusion rates and longer hospital stay than TUR-P and LT.

* Risk of transfusion was not different between TURP and LT, but TUR-P was superior to LT concerning length of hospital stay.

* Re-intervention rates did not differ between the groups.

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14. Prostatecenter Spenh, Spenh, Germany
15. Prostatecenter Rhine-Ruhr, Oberhausen, Germany
16. Prostatecenter Elbe-Weser, Stade, Germany
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