Results

Mean anorectal dose and surface > 70 Gy (570) were 29.0 Gy vs 29.5 Gy (p=0.4) and 14.2% vs 12.6% (p<0.01), for HF and SF, respectively. Differences between hospitals varied between 24.7 Gy-33.2 Gy (average mean dose) and 10.4%-16.1% (average 570), and were significant (p<0.01).

Patient-reported GI symptoms of blood loss (p<0.001) and use of pads (p<0.01) were significantly higher in the HF group (FIG 1); pain with stools, abdominal cramps, and diarrhea were not increased and mucus loss was non-significantly increased (p=0.07). Significant differences between hospitals were observed for all complaints, except rectal pain (FIG 2). In general, the hospital with rectal balloon (D) and hospital with MRI delineation (A) showed favorable dose parameters and symptom patterns compared to the other hospitals. Patients treated with a rectal balloon reported relatively low symptom rates but at the same time, prescribed medication for GI complaints was reported more frequently as well (14% doctor’s reported versus 4% for the other hospitals).

Conclusion

We conclude that the HF schedule was associated with slightly larger rectal high-dose volumes assuming an α/β of 3 Gy, and a significantly higher risk of rectal bleeding and use of pads. Furthermore, we found that variation in local treatment protocols had a significant impact on rectal dose and toxicity risks, despite the use of similar techniques and identical dose prescriptions.
OC-0129 5-year safety, efficacy & quality of life outcomes from multi-center SBRT trial for prostate cancer
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Purpose or Objective
Single-institution studies suggest SBRT is a cost-effective alternative to external-beam RT for prostate cancer. We hypothesized that dose-escalated SBRT could be safely administered across multiple institutions, and that in low-risk (LR) patients, dose escalation would improve 5-year disease-free survival (DFS) rates compared to historic controls. We now also report 5-year quality of life (QOL) outcomes.

Material and Methods
21 centers enrolled 309 evaluable patients with biopsy-proven prostate adenocarcinoma: 172 with low-risk, and 137 with intermediate-risk (IR) disease. All patients were treated with a non-coplanar robotic SBRT platform using real-time tracking of implanted fiducials. The prostate was prescribed 40 Gy in 5 fractions of 8 Gy. Toxicities were assessed using CTCAE v3 criteria, and biochemical failure using the nadir+2 definition. Study populations yielded outcomes from multi-institution studies suggesting SBRT is a cost-effective alternative to external-beam RT for prostate cancer. We now also report 5-year DFS and 51 months after treatment. For the entire group, actuarial 5-year overall survival was 95.6%, and DFS was 97.1%. In LR patients, the 5-year DFS was 97.3%, which was superior to 93% DFS from historic controls (p=0.014). 5-year DFS was 97.1% for IR patients.

Patient-reported QOL outcomes are described in the table below. Clinically relevant declines in urinary irritative scores from were observed at 1 and 12 months after treatment, with subsequent return to baseline. A fall in bowel QOL was seen at 1 month only. The gradual decline in sexual QOL did not reach clinical relevance.

<table>
<thead>
<tr>
<th>Follow-up interval</th>
<th>Baseline</th>
<th>1 mo</th>
<th>6 mo</th>
<th>1 yr</th>
<th>2 yr</th>
<th>3 yr</th>
<th>4 yr</th>
<th>5 yr</th>
</tr>
</thead>
<tbody>
<tr>
<td># responses</td>
<td>298</td>
<td>294</td>
<td>210</td>
<td>263</td>
<td>265</td>
<td>223</td>
<td>191</td>
<td>163</td>
</tr>
<tr>
<td>Incontinence</td>
<td>93.5</td>
<td>89.3</td>
<td>90.8</td>
<td>87.7</td>
<td>88.9</td>
<td>89.2</td>
<td>87.6</td>
<td>86.5</td>
</tr>
<tr>
<td>Irritative</td>
<td>87.6</td>
<td>75.0*</td>
<td>84.8</td>
<td>80.9*</td>
<td>87.2</td>
<td>89.0</td>
<td>90.3</td>
<td></td>
</tr>
<tr>
<td>Bowel</td>
<td>94.8</td>
<td>83.4*</td>
<td>92.1</td>
<td>90.8</td>
<td>92.2</td>
<td>93.0</td>
<td>92.3</td>
<td>92.5</td>
</tr>
<tr>
<td>Sexual</td>
<td>56.2</td>
<td>53.7</td>
<td>51.1</td>
<td>43.8</td>
<td>47.8</td>
<td>47.6</td>
<td>45.8</td>
<td>43.1</td>
</tr>
</tbody>
</table>
*—clinically relevant

Conclusion
Dose-escalated prostate SBRT can be safely administered across multiple institutions. In LR patients, 5-year DFS rates are superior to historical EBRT control rates. In IR patients, 5-year DFS also appears favorable. Declines in GI and GU QOL are transient. SBRT is a suitable option for low- and intermediate-risk prostate cancer.

OC-0130 Prostatic sarcomas: a large multicentric Rare Cancer Network study
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7Clinica IRAM, Radiation Oncology, Santiago, Chile
8Istituto San Raffaele, Urology, Milano, Italy
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11Hopitaux Universitaires de Genève, Radiation Oncology, Genève, Switzerland
12Centre Georges-François Leclerc, Radiation Oncology, Dijon, France
13Centre Hospitalier Universitaire Vaudois, Radiation Oncology, Lausanne, Switzerland

Purpose or Objective
Adult prostatic sarcomas (PS) are rare. While surgery is considered the standard approach, the role of other therapies is not completely established. We report data on a large population of adult, non-metastatic PS patients (pts).

 tính toán thời gian và chọn phương pháp điều trị. Kết quả chia sẻ từ các nghiên cứu multi-institution đã cho thấy SBRT là một phương pháp an toàn và hiệu quả trong điều trị ung thư tiền liệt tuyến, đảm bảo được sự ổn định của các chỉ số QOL như biểu hiện dịch vụ (DSF) sau 5 năm. Trong nhóm LR, tỷ lệ DSF 5 năm đạt 97.3%, vượt trội so với 93% DSF từ các kiểm soát lịch sử (p=0.014). 5 năm DSF trong nhóm IR đạt 97.1%.

Nhiều người bệnh có biểu hiện giảm nhẹ về chức năng tiêu hóa, các triệu chứng tiêu hóa như đau nhức, mệt mỏi. Tuy nhiên, sự giảm nhẹ về chức năng tình dục không đạt mức độClinically relevant. Tóm lại, SBRT là một lựa chọn tốt cho các trường hợp ung thư tiền liệt tuyến thấp và trung bình do lưu lượng khả năng suy giảm sau 5 năm.

Mục tiêu
Để thuyết minh cho sự an toàn và hiệu quả của SBRT trong điều trị ung thư tiền liệt tuyến, chúng tôi đã dựng lên một quan điểm về cách tiếp cận điều trị được Tập đoàn Multi-institutional rare cancer network (ESTRO 36) trình bày trong báo cáo này. Các nghiên cứu multi-institution đã cho thấy SBRT là một lựa chọn an toàn và thích hợp cho các trường hợp nguy cơ thấp (LR) và trung bình (IR) kết hợp với việc tăng cường liều lượng. Kết quả cho thấy tỷ lệ DSF 5 năm ở LR đạt 97.3%, vượt trội so với 93% DSF từ các kiểm soát lịch sử (p=0.014). 5 năm DSF trong nhóm IR đạt 97.1%.

Tóm lại, SBRT là một lựa chọn tốt cho các trường hợp ung thư tiền liệt tuyến thấp và trung bình do lưu lượng khả năng suy giảm sau 5 năm.