Peer Review File

Article information: https://dx.doi.org/10.21037/aoj-20-117

Comment 1: Title – the techniques are both older and newer – wonder if "historical and evolving techniques..." or a similar modification makes sense.

Reply 1: Thank you for this comment. I agree and have made a change to the title.

Changes in the text: Title changed line 53

Comment 2: Line 143 – to remain consistent would change "prostate" to "prostate carcinoma" or "prostate cancer"

Reply 2: Thank you. I agree and have made that change in Line 143

Changes in the text: Change in Line 143

Comment 3: Line 176 – unclear if the phrase "make light" is intended?? Does the author intend to state "highlight"?

Reply 3: Thank you. I agree and have made that change in Line 176

Changes in the text: Change in Line 176

Comment 4: Line 238 – "metastatic renal cell ca" should be spelled out – "cancer"

Reply 4: Thank you. I agree and have made that change in Line 238

Changes in the text: Change in Line 238

Comment 5: Are there technical limitations to radiofrequency ablation or cryoablation? Historically, radiofrequency ablation and cryoablation are reserved for smaller lesions. Is there a size above which these modalities are less effective or pragmatic? Locations which should be avoided? Can these generally guidelines

be expanded upon a little? Additionally, there has been some work using guided high frequency ultrasound to essentially denervate painful skeletal foci. The modality may not have gained tremendous favor but has been reported to a limited extent. Is it worth mention?

Reply 5: Thanks for your comments. I agree ablative techniques are gaining favor for the treatment of metastatic disease about the pelvis and acetabulum and this topic deserves for information in the manuscript. A number of changes are made to the manuscript, and new references are added, including outcomes from a recent prospective trial published this year.

Changes in the text: Changes to manuscript lines 208-253

Comment 6: Line 238 – "et all" should be "et al"

Reply 6: Agree, thank you

Changes in the text: Change made to line 238

Comment 7: Line 271 "in a "trans-columnar"" is awkward and should be restated – "in a trans-columnar fashion" or similarly.

Reply 7: Agree, thank you

Changes in the text: Change made to line 271

Comment 8: Line 272 – no cement was used in this series to augment the percutaneous screws. Cement was used in the setting of total hip revision only.

Reply 8: Thank you for clarifying this. My mistake. I have reviewed that paper for my own knowledge and made changes to the manuscript.

Changes in the text: Changes made to the text Line 272

Comment 9: Line 277 – "ultimately" is confusing. I imagine the author intends to say the ultimately some patients will progress or their disease will prove refractory. Would restate.

Reply 9: Agree, thank you

Changes in the text: Changes made to the text line 277

Comment 10: Line 269 – Tri-flange custom implants have been available for some time – even prior to the recently popularized 3D printing or additive manufacturing technologies – which is more of a means than an end. Is there a roll for discussing larger custom implants, as they replace the need for cement, provide immediate stability through robust screw fixation, often use a "stem" similar to the pedestal cup which can be surface treated, and offer a large surface area for bone ongrowth or ingrowth. Cost and manufacturing time are certainly considerations. As stated – it seems like custom acetabular reconstruction using mega-acetabular components only arose following and due to 3D printing – which is simply not true.

Reply 10: Thank you for pointing this out. I agree that custom implants were available before the use of 3D printing. The reviewer's comments are important and have been added to the manuscript.

Changes in the text: Changes and additions to text are made lines 341-351

Comment 11: Given the increasing focus on cost and – is there a roll for including a few words on the matter for each approach? Some require no hospitalization. Others require a short inpatient stay while others much longer admission lengths. The risks – particularly in the ongoing COVID era, but also in the age when burgeoning medical costs including implant costs are spiraling – it arguably is important to consider.

Reply 11: I agree this is an important point. Unfortunately, on careful review of the literature, there are no reliable studies comparing the costs of the varied approaches to treatment of metastatic disease to the acetabulum. An acknowledgment of this was added to the conclusion.

Changes in the text: Additions made to manuscript Lines 386-389

Comment 12: There are a few additional stylistic or grammatical improvements that might be made.

Reply 12: Agreed and changes were made hopefully to improve on this Changes in the text: Changes made to text.