# Digital pain drawings differ between persons with greater trochanteric pain syndrome and the clinician

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## Background

Minimising differences in how pain distribution is depicted by patients with chronic, musculoskeletal conditions and clinicians may improve communication and may benefit management. Greater trochanteric pain syndrome is one of the most commonly presenting tendinopathies in middle-aged females and has a diverse pain presentation.

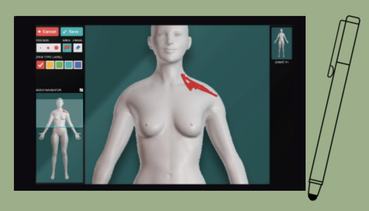
## Aims

Pain drawings were compared between patients with GTPS and clinician (physiotherapist).

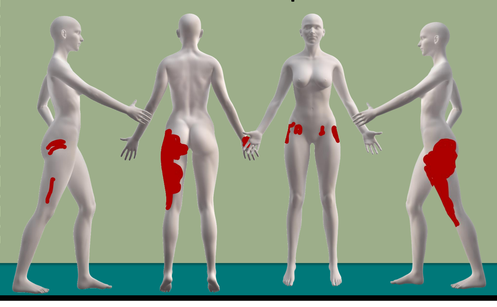
*Specific aims were*

1) To assess the agreement of the area of pain using Bland-Altman plots
2) To assess any differences in pain drawings using overlay images, with the bounding box (shape ) and by using the Jaccard index (location ).

## Methods



Digital pain drawings of front, back, left and right charts were completed



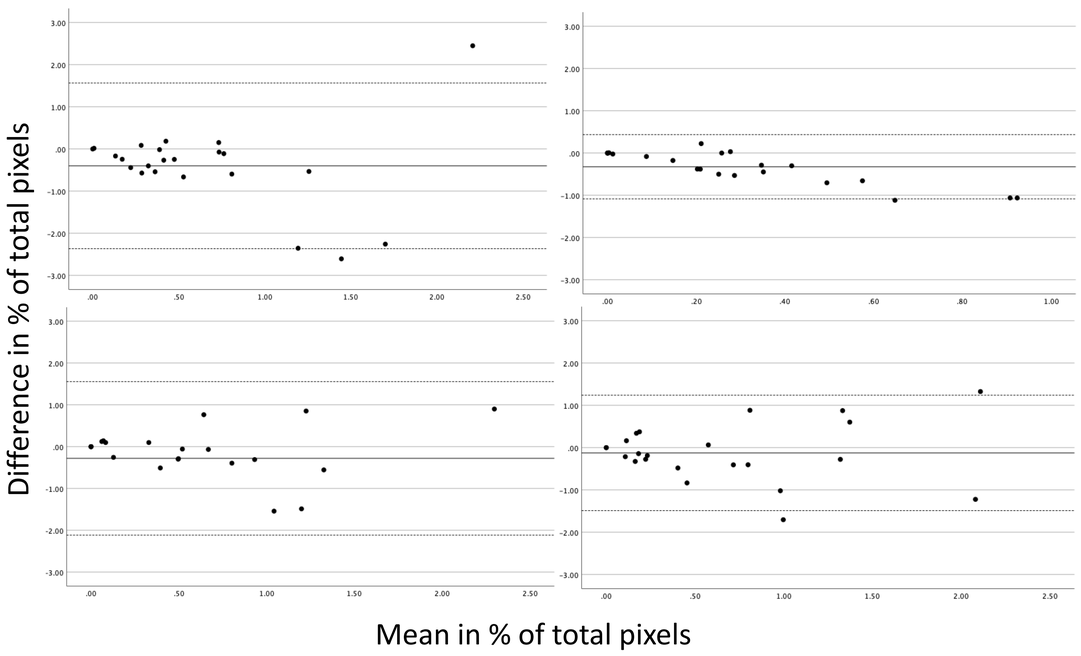
23 Greater trochanteric pain syndrome

- Age 50 (SD 10) years
- 91% female
- Duration of symptoms median 12 (IQR 8 - 24) months
- Average pain median 4/10 (IQR 3 – 5)

1 Physiotherapist

- Musculoskeletal physiotherapist with >20 years of clinical experience
- A single clinician completed all n=23 drawings

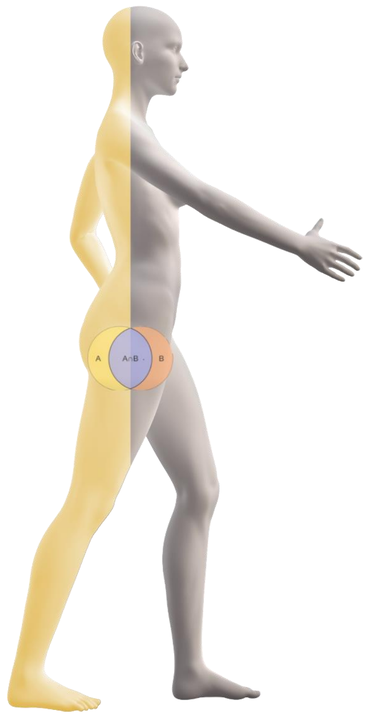
## 1. Agreements in area




The mean differences (limits of agreement [LOA]) in the area between clinician and patient drawings were less than -0.5% (LOA ranged between -2.35% to 1.56%) of total pixels for all charts (Bland-Altman plots).

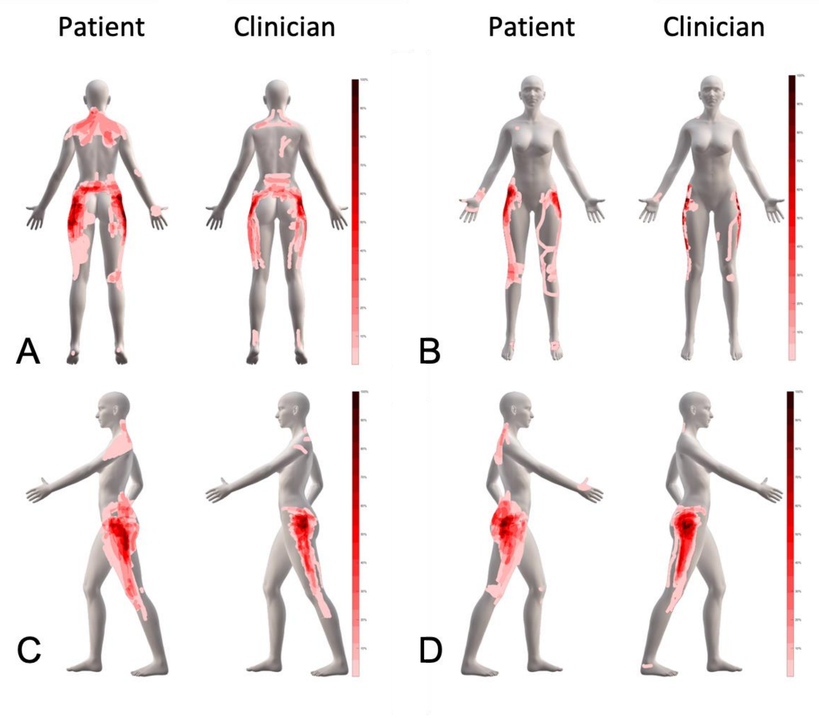
## 2. Differences in pain drawings

### Location




There was minimal overlap between patient and clinician drawings (Jaccard index range 0.09-0.18 out of 1).

### Shape




Bounding box showed similar overall shape in drawings for front (A), back (B), left (C), and right (D) views ($p>0.17$).

## Conclusions

These findings suggest differences in location, but *not in* area or shape

## Discussion

The use of digital pain drawings may improve patient-clinician communication.

Impact of these findings on the decision-making and management of patients remains to be determined.

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