

## Review report

Final title: **Barraquer–Simons syndrome: A case report**

Title at submission: **Acquired partial lipodystrophy/ Barraquer–Simons syndrome: A different rare form of lipodystrophy**



OPEN ACCESS

Reviewer: Syed Azmal Mahmood, ORCID: [0009-0002-1808-8816](https://orcid.org/0009-0002-1808-8816)

### Overview

This is a very interesting and one of the rare case reports of Acquired partial lipodystrophy (Barraquer-Simons syndrome). It is characterized by the loss of adipose tissue from the face and upper trunk, with sparing or increased adiposity in the rest of the body. Although I believe that the content could be published, it requires minor changes to grammar and syntax.

### Correspondence

Mita Dutta  
[mitadutta42@gmail.com](mailto:mitadutta42@gmail.com)

### Publication history

Received: 22 Dec 2024

Accepted: 30 Mar 2025

Published online: 20 Apr 2025

### Handling editor

Tahniyah Haq  
0000-0002-0863-0619

### Reviewer

Syed Azmal Mahmood  
0009-0002-1808-8816

### Keywords

*lipodystrophies, Barraquer–Simons syndrome, fat wasting*

### Ethical approval

Ethical approval was not sought because this is a case report. However, written informed consent was obtained from the patient for publication of this case report and any accompanying images.

### Funding

None

### Trail registration number

Not applicable

- 1 **Comment** Would it be more appropriate if the title is "Acquired partial lipodystrophy/ Barraquer–Simons syndrome: A rare form of lipodystrophy"
- Response** Title is corrected to "Acquired partial lipodystrophy/ Barraquer–Simons syndrome: A rare form of lipodystrophy"
- 2 **Comment** Was there any evidence of autoimmunity (dermatomyositis, hypothyroidism, pernicious anemia, rheumatoid arthritis, temporal arteritis, or mesangiocapillary glomerulonephritis)?
- Response** At present, she had neither feature of autoimmunity like any skin rash, oral ulcer, photosensitivity, joint pain, proximal myopathy, anemia nor kidney disease like frothy urine, high colour urine, hypertension, puffy face or leg edema (dermatomyositis, hypothyroidism, pernicious anemia, rheumatoid arthritis, temporal arteritis, or mesangiocapillary glomerulonephritis).
- 3 **Comment** What about the renal function? ( As 20 percent of patients develop membranoproliferative glomerulonephritis)
- Response** Renal function was evaluated repeatedly by urine R/M/E, urine ACR and serum creatinine, all were found normal. Yes, there is risk of developing membranoproliferative glomerulonephritis but all cases may not present at initial diagnosis, according to literature patients can develop it 7-8 years after her initial diagnosis, so patient is kept on follow-up.
- 4 **Comment** Were serum antinuclear and anti-double stranded DNA antibodies done?
- Response** Yes, we checked her serum antinuclear antibody (ANA) that was found negative, as ANA have high sensitivity and it was found negative so we did not go for anti-double stranded DNA Ab test.
- 5 **Comment** First para of Discussion section: It would be better if simple sentences are used instead of complex and large sentences
- Response** First para of Discussion section is corrected according to your advice.

Asst. Editor: Tahniyah Haq, ORCID: [0000-0002-0863-0619](https://orcid.org/0000-0002-0863-0619)

- 1 **Comment** Please mention the fat percentage – whole body and regional (abdomen, hip and lower limb).
- Response** Fat percentage are also mentioned – whole body (total fat 36 %) and regional fat [(Head 20%, left arm 27.2%, right arm 26.6%, left ribs 30.5%, right ribs 31.9%, total spine 31.3%, pelvis 35%, left leg 44.9%, right leg 43.3%, android 32%, gynoid 39.6%) and Fat tissue in gram left arm 630 gm, right arm 609 gm, left leg 4272gm, right leg 4090 gm].
- 2 **Comment** How was the diagnosis made and confirmed in this case?
- Response** The diagnosis was made by the proposed criteria of Mishra *et al.*, 2004. Clinically patient have characteristic atrophy of upper part of body (atrophy of face and breast) and marked hypertrophy of lower part of body, that was further confirmed by measurement of her fat mass by DEXA scan. Further confirmation was enhanced by elevated fasting insulin, HOMA-IR, dyslipidemia, and low C3 complement level in this case.
- 3 **Comment** The treatment and follow up can be shifted to the case report section.
- Response** The treatment and follow has been be shifted to the case report section

- 4 **Comment** Please give a more detailed description of the disorder – what it is, associations, diagnosis and treatment. How does pioglitazone improve fat distribution in these cases?
- Response** it is a lipodystrophy, associations found with some viral illness, autoimmune connective tissues diseases like SLE, Dermatomyositis, hematological disease like pernicious anemia, Diagnosis is on the basis of clinical suspicion, with imaging that support the increased fat mass in her lower body, in our case we did it by DEXA scan, Complement C3 was found low that was another favourable point for her diagnosis. Again high fasting insulin, HOMA-IR, dyslipidemia were also in support of this type of lipodystrophy. Treatment options were very limited pioglitazone, metformin, statin, fibrate, insulin need to be use accordingly to treat the underlying metabolic disturbance. In our case we used pioglitazone, statin to correct her metabolic disturbance. Main treatment for her facial lipodystrophy is surgical autologous fat transplantation that was also counselled to the patient.
- 5 **Comment** Why has this case been reported? What were the typical and atypical features?
- Response** How does pioglitazone improve fat distribution in these cases? Pioglitazone improves fat distribution by redistributing body fat from visceral and ectopic areas to subcutaneous adipose depots. This is associated with a reversal of chronic inflammation and insulin resistance. Here are some ways pioglitazone improves fat distribution
- 6 **Comment** Please mention whether informed consent, including consent for pictures was taken. Consent form may need to be submitted later.
- Response** It is a very rare case, so need to be reported, as there is no reported case from Bangladesh till today. Typical finds were 1. body distortion by atrophy of upper body fat and excessive accumulation of fat in her lower part of body, 2. Psychological distress due to facial buccal fat loss both for the patient and her family as facing difficulty in her marriage proposal 3. Low complement C3 level, 4. Features of insulin resistance, 5. Umbilical hernia. Atypical features include no features of autoimmune diseases like SLE, dermatomyositis and no renal abnormalities.
- 27 Jan 2025
- 1 **Comment** It will be better to state all the investigations with the normal values in a table. The normal values of the fat percentages should be mentioned, so we can see how different her values are.
- Response** Yes, it may be better to state all the investigations with the normal values in a table. But according to the case report format of BSMMU, maximum 1 either figure or table can be attached. As you wanted to see the investigations in a table, that was done in the file. Sorry madam, I didn't get any evidence of the normal values of the fat percentages in different body sites (head, arm, thigh, legs and so on). So I failed to mention it in the table. If you have any available literature or evidence in this regard, please provide it to me; I can add this in this article. Moreover as the previous reviewer 2 wanted to include these so need to mention in the article. For better understanding I attached a picture, for publication of this case we wanted to took photograph as like this picture, but as patient did not allow it, so we do the DEXA to see the body fat mass whether it match with BSS or not.
- 2 **Comment** Did the patient come for follow up (line 47)? If so, what were the changes in her clinical features and reports on follow up?
- Response** Yes, the patient come for follow up (line 70-74). There were no significant changes in her clinical features and reports on follow up are shown in separate table 2b. Moreover, we did the DEXA scan to see the fat % and the photographer whether it match with BSS or not, we will not do it in follow-up. As she is doing well having no physical problem at present so she and her family are reluctant to visit frequently, rather they are thinking about the facial fat graft due to her marital issue.
- 3 **Comment** Do not give references in the case management section (line 43, 44 and 48). It is better to include this in the discussions.
- Response** References are removed from the case discussion (Line 65 to 74).
- 4 **Comment** The flow/ sequence in the discussion needs much improvement. The author has gone back and forth on some points. There is also repetition eg (line 51 and 52, 65 and 66, 83 to 85.). First, mention why you are presenting this case. Then mention how you diagnosed it as BSS. Then discuss the atypical features with possible explanation. Then write about the disease and its treatment.
- Response** The flow/ sequence in the discussion were improved according to your suggestions (First, mentioned why we are presenting this case. Then mentioned how we diagnosed it as BSS. Then discussed the atypical features with possible explanation. Then wrote about the disease and its treatment). Repetitions are corrected also.
- 5 **Comment** Lines 57 and 58 are not clear.
- Response** Lines 57 and 58 are corrected.
- 6 **Comment** Avoid abbreviations where possible (eg lines 23, 28, 30, 31...). Elaborate the terms. There are some errors in sentence construction. I would advise to use short sentences written in active voice.
- Response** Abbreviations are avoided where possible (eg lines 23, 28, 30, 31...). Sentences are re-constructed according to your advices.
- 7 **Comment** Please follow the format for case reports (template is given in the website).
- Response** The format of the case reports is followed (according to the template).

6 Feb 2025

1 **Comment** I have noticed that your corrections were not done in the document which had been mechanically edited by our office. I am attaching that document here. Please make all the corrections that you have made in this document. Otherwise, it will not be acceptable.

**Response** In my revised manuscript 'the paragraph on key messages' are being added.

2 **Comment** Since 1 figure is allowed, you need to coalesce the 6 pictures into 1 figure. Provide an appropriate legend.

**Response** Regarding my Figure, as per your suggestion by using PowerPoint to coalesce the 6 pictures in 1 frame then attached to the file.

3 **Comment** The follow up table is still confusing. Please mention clearly the follow up after treatment with pioglitazone and statin only in the text. Omit table 1b.

**Response** Table is removed from the group of pictures and attached to the last page of the file.

11 Feb 2025

1 **Comment** The title should be "Acquired partial lipodystrophy/ Barraquer-Simons syndrome: a case report"

**Response** The title is corrected as you mentioned "Acquired partial lipodystrophy/ Barraquer-Simons syndrome: a case report"

2 **Comment** The key message should not exceed 60 words.

**Response** The key message is kept below 60 words.

3 **Comment** Reduce the word count of the manuscript to under 750.

**Response** The word count of the manuscript is reduced to 750.

4 **Comment** Incorporate the most relevant investigations in the text. Omit the table.

**Response** Incorporation of the most relevant investigations are added in the text. Omitted the table. Table was previously mentioned by you, so was added in the file previously.

5 **Comment** There is no need to describe the change of lipid profile with contraceptive pill use. Just mention the initial lipid profile levels.

**Response** The change of lipid profile with contraceptive pill is removed from the text.

6 **Comment** Improve the figure – in terms of alignment, size and reduce the space between images.

**Response** Improvement of the figure is done as per as possible and understandable – (alignment, size and reduce the space between images)

7 **Comment** The discussion still needs much improvement. You need to work on the flow of your discussion

**Response** The discussion is tried to improved as much as possible. Previously the flow of discussion was arranged by the reviewer now i did it as i thought to be better.