

Ongoing symptoms and reduced health measures in unicentric Castleman disease patients despite perceived-to-be curative surgical excision

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Introduction

- Unicentric Castleman disease (UCD) is one of several subtypes of CD that share characteristic histopathology.
- UCD is characterized by a single region of enlarged lymph nodes (LN) and milder symptoms than other forms of CD.
- UCD symptoms can occur due to compression of neighboring structures or inflammatory cytokine production.
- The complete surgical excision of the enlarged LN is curative in 84-96% of patients.¹
- Many UCD patients, however, describe persistence or worsening of symptoms post-LN excision despite the absence of measurable disease.
- We sought to better characterize and describe the experience of UCD patients using surveys that captured information about general quality of life (QOL) and specific health measures.

Methods

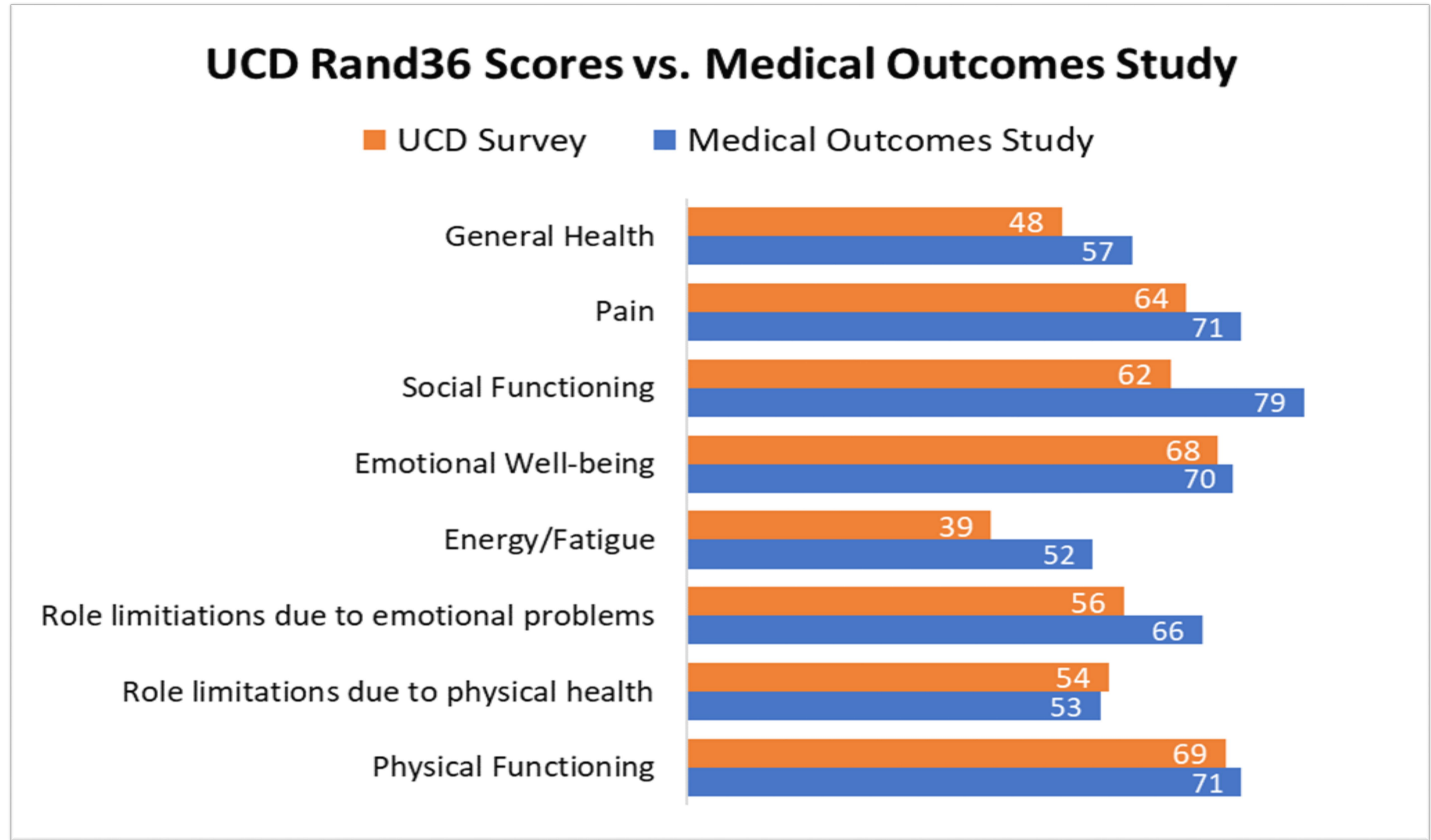
- All patients enrolled in the ACCELERATE Natural History registry (NCT02817997) who either self-reported or were suspected of having a UCD diagnosis were invited to participate in a series of validated surveys including:
 - Rand36-item Short Form Survey
 - EQ-5D-5L
 - Multicentric CD Symptom Score Survey
- Participants also completed an additional survey regarding ongoing symptoms.
- Among the 107 UCD patients invited to participate, 51 (48%) completed all 4 surveys
- A subset of 25 of these patients who had been reviewed by a panel of physicians confirming a UCD diagnosis was also analyzed (Confirmed Subcohort, CS).

Results

Table 1. Symptoms described post-LN excision

	Ongoing symptoms post-LN excision N=51
No Symptoms, N (%)	2 (3.9)
Shortness of Breath, N (%)	13 (25.5)
Loss of Appetite, N (%)	9 (17.7)
Tiredness/fatigue/lack of energy/feeling weak, N (%)	31 (60.8)
Skin lesions or rash, N (%)	15 (29.4)
Itching, N (%)	13 (25.5)
Numbness or tingling, N (%)	18 (35.3)
Pain, N (%)	20 (39.2)
Fever, N (%)	4 (7.8)
Swollen/enlarged lymph nodes, N (%)	17 (33.3)
Swelling or edema in other body areas, N (%)	12 (23.5)
Night Sweats, N (%)	20 (39.2)
Excessive Daytime sweating, N (%)	11 (20.6)
Headaches, N (%)	17 (33.3)

Figure 1. UCD health-related QOL measures post-LN excision (N=51)



Responses to the Rand36-item Short Form Survey are plotted for UCD patients post-LN excision and for a Medical Outcomes Study cohort consisting of individuals with diabetes, hypertension, coronary heart disease, and/or depression. Scores range from 0-100, with lower scores indicating poorer health measures

Figure 2. General health index scores post-LN excision (100 being perfect health, 0 being worst health imaginable.) All respondents in blue and CS in orange.

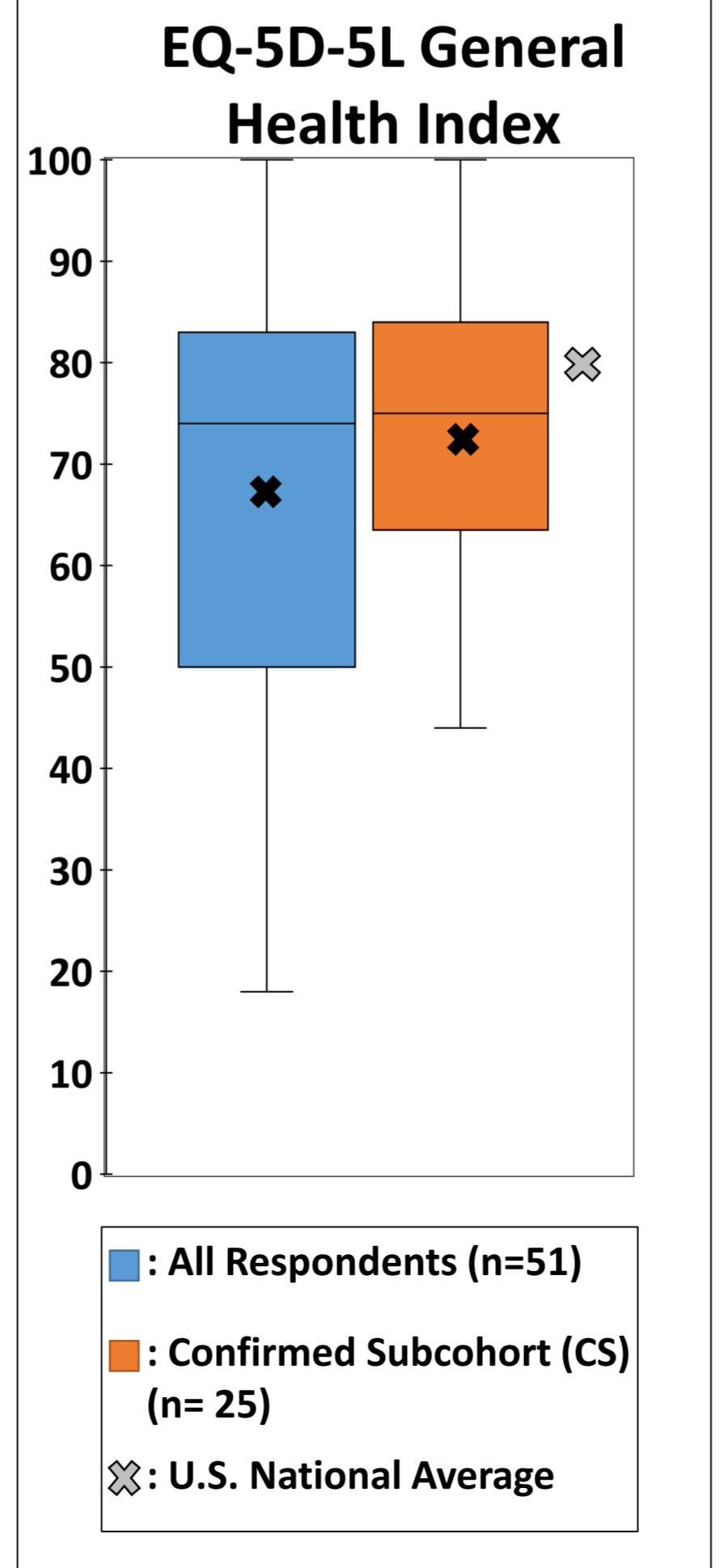


Table 2. Time since most recent LN excision for those experiencing ongoing symptoms on day of survey

Time since most recent LN excision	N (%)
Less than 1 week	0
1 week- 1 month	0
1 -3 months	0
3-6 months	1 (3.7)
6 months – 1 year	1 (3.7)
More than 1 year	25 (92.6)

Summary & Discussion

- Overall, these data suggest that a perceived-to-be curative excision may not actually result in symptom-free outcomes in a substantial proportion of UCD patients.
- Patients reported lower QOL metrics than a sample representative of the general US population as well as health measures comparable to a cohort of individuals with chronic health conditions.
- Notably, the full, self-reported cohort consistently reported lower (more unhealthy) scores than the confirmed subcohort (not statistically tested)
 - A different, undiagnosed disorder may thus be the root cause of symptoms for some patients in the self-reported UCD cohort.
- Patients may also be experiencing co-morbidities responsible for continued symptoms rather than UCD itself.
- These results may be confounded by reporting bias and may not be representative of the full UCD population.

Future Directions

- Future work is needed to correlate the survey responses with clinical, laboratory, and experimental data in order to further elucidate the mechanisms behind symptoms post-LN excision and to determine treatment options.
- A panel of clinicians and pathologists will review the clinical history of each survey respondent to confirm likelihood of UCD diagnosis.

References

1. van Rhee, Frits, et al. "International evidence-based consensus diagnostic and treatment guidelines for unicentric Castleman disease." *Blood advances* 4.23 (2020): 6039-6050.
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