Burden of Active LN

- Active LN had the greatest HRQoL impact on the domains of procreation, physical, and emotional functioning compared to patients with inactive LN or SLE-only, as measured by lupus-specific questionnaires (LupusPRO, LupusQoL, etc.) (Table 1).

- Patient-perceived burden of active LN was more pronounced vs. other SLE organ system manifestations, with adults with active LN reporting worse scores in almost all domains of the SF-36, suggesting a deterioration in multiple aspects of life, such as physical and emotional functioning (Table 1).

- A targeted literature review (TLR) was conducted in MEDLINE/Pubmed and Embase in adult and juvenile patients with diagnosed LN.

- Inclusion and exclusion criteria.

Study Cohort | Control Cohort | LN vs Control
---|---|---
SLE + LN (N=539) | SLE only (N=718) | Worse scores in LupusPRO medications, procreation, pain–vitality domains (p<0.03)
SLE + LN (N=342) | SLE only (N=138) | Lower prevalence of moderate-to-severe forgetfulness, muscle pain, and numbness in SLAQ assessment (p<0.05)
SLE + Active LN (N=129) | SLE + Inactive LN (N=410) | Worse scores in LupusPRO symptoms, medications, procreation, emotional health, body image, and summary HRQoL domains (p<0.001)
SLE + Active LN (N=294) | SLE + Inactive LN (N=204) | Worse scores in all domains of LupusQoL (p<0.001)
SLE + Active LN (N=342) | SLE + Inactive LN (N=33) | Worse SLAQ scores in disease severity and muscle pain (p<0.005)
SLE + LN with ≥1 flare/year (N=904) | SLE and/or LN with 0 flares/year (N=162) | Worse LIT scores (p<0.001) and greater negative QoL impact with increased flare frequency
SLE + LN (N=566) | SLE only (N=1,261) | Worse scores in SF-36 BP and VT domains (p<0.006)
Renal SLE (N=90) | Other SLE (N=162) | Worse scores in SF-36 RE (p<0.001), RP (p<0.001), BFI (p=0.02), VT (p=0.022), SF domains (p=0.007)

Impact of Current SoC on HRQoL

- Only two studies were identified on the impact of currently available treatment options on patient HRQoL, both of which were published prior to 2015.

- No studies were identified on more recently approved therapies for LN, as vlocizumab, and belimumab, due to age of identified studies.

Results (cont’d)

Results (cont’d)

RITUXIMAB (RTX) on HRQoL

- In a phase III RCT, RTX improved baseline SF-36 physical function score for patients with LN, although not statistically or nominally significant compared to mycophenolate mofetil (MMF) alone.

CYCLOPHOSPHAMIDE (CYC) on HRQoL

- One RWE study focused on outcomes of induction therapy with CYC and used lupus-specific QoL measures.

Patient and Physician Satisfaction and HRQoL in Juvenile LN

- Despite currently available treatment options, dissatisfaction with disease control was reported by one fourth of nephrology physicians and one third of patients, with degree of dissatisfaction associated with LN severity and various signs and symptoms of disease.

- LN patients noted that restoring health, improved QoL, and effective patient-physician communication regarding benefits and harms as the most relevant aspects of treatment.

Conclusions

- The limited evidence on HRQoL in patients with LN vs. patients with SLE only, measured by various disease-specific PROMs in interventional studies, highlights a key evidence gap in understanding the humanistic burden of LN and the impact of SoC on patient well-being.

- In 1 or 3 patients with LN are dissatisfied with their disease control, further indicating a high unmet need for effective therapies and improved disease management.

References


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