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**IMPROVED QUALITY OF LIFE AMONG RELAPSING-REMITTING MULTIPLE SCLEROSIS PATIENTS TREATED LONG-TERM WITH GLATIRAMER ACETATE**

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**OBJECTIVE:** To compare health-related quality of life (HRQoL) among relapsing-remitting multiple sclerosis (RRMS) patients receiving long-term glatiramer acetate (GA) treatment with those having similar disease duration but remaining untreated or treated short-term with GA or beta-interferons.

**METHODS:** Patients followed in year nine of the prospective, open-label continuation of the US pivotal study of GA were consented for this cross-sectional survey (GA Group) at office visits. MS Surveys were presented for home completion and mail-back. Concurrent RRMS comparators from the North American Research Committee on MS registry were selected by matching 4:1 (untreated) and 1:1 (per treatment) on gender, education level, present age +2 years, and duration of MS (years). Returned postcards affirming participation prompted mailed MS Surveys. Each survey included the validated MS Quality of Life Inventory (MSQOL), and Goodin’s MS Questionnaire (disability), satisfaction with life, health, therapy, and sociodemographic characteristics. Matched paired comparisons used Hotelling multivariate T-square analysis and McNemar’s test.

**RESULTS:** Response rates were 94.8% for GA Group and 78.4% for comparators. The GA Group reported significantly more life satisfaction (Mean [M]: 2.20 vs. 3.03; 95%CI 78.4% for comparators. The GA Group reported significantly better mental health than those with a similar disease duration but remaining untreated or treated short-term with GA or beta-interferons.

**CONCLUSION:** After three months on natalizumab, patients reported improvements in overall QoL, disease level and functional status. These outcomes were positively and significantly associated with one another suggesting that, in a real world setting, patients may begin experiencing improvements in disease progression and QoL as early as three months after natalizumab initiation.

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**ASSOCIATION BETWEEN CHANGE IN OVERALL QUALITY OF LIFE (QoL), DISEASE LEVEL AND FUNCTIONAL STATUS SINCE NATALIZUMAB INITIATION**

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**OBJECTIVE:** To assess the relationship between changes in patient-reported QoL, disease level and functional status after three months on natalizumab (TYSAWR). METHODS: MS patients who received their 3rd natalizumab infusion and were enrolled in the manufacturer’s restricted distribution program (TOUCH), participated in a 20-minute cross-sectional internet or telephone survey. Patient-reported measures included an adapted version of the Multiple Sclerosis Impact Scale-29 (MSIS-29), pre/post disease level and functional status scores and prior MS drug use. MSIS-29 responses were modified to measure patient-perceived change since initiating natalizumab. Paired t-tests assessed pre/post changes in disease level and functional status, where positive change indicated improvement.

**RESULTS:** Results from 319 patients in this ongoing survey (expected n ≥ 400) indicated that 75% were female and, on average, were diagnosed with MS over 11 years ago. Almost all (97%) patients used ≥1 MS drug before natalizumab. The most frequently used drugs were: interferon beta-1a (Avonex) (67%), glatiramer acetate (Copaxone) (49%), interferon beta-1b (Beta- seron) (36%) and interferon beta-1a (Rebif) (35%). Despite the short treatment duration, there were significant improvements in disease level (0.30 ± 1.13; t = 4.78; p < 0.001) and functional status (0.36 ± 0.80; t = 7.96; p < 0.001). MSIS-29 items with greatest reported improvement since initiating natalizumab were: “worries related to MS” (66%), “feeling unwell” (64%), ability to do “physically demanding tasks” (63%), “problems with balance” (61%), “feeling mentally fatigued” (61%) and “difficulties moving about indoors” (60%). Items with least reported improvement were: “tremors of your arms or legs” (49%), “being stuck at home” (49%), “problems sleeping” (49%) and “problems using transport” (42%). On average, patients reported improvement on 13 of 29 (45%) MSIS-29 items. CONCLUSION: After only 3 months on natalizumab, patients reported improvements on MSIS-29 items, disease level and functional status. While preliminary, these early results are suggestive of natalizumab’s beneficial effect on patients and warrant further long term investigation of its impact on patient outcomes in a real-world setting.