

Drug treatment and adherence of subjects <40 years with diagnosis of heterozygous familial hypercholesterolemia

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AIM: To describe the therapeutic approach in young adult patients diagnosed with heterozygous familial hypercholesterolemia (HeFH) and their adherence and persistence to treatment.

METHODS: From regional administrative databases, individuals aged ≤ 40 years, who received exemption for HeFH between January, 1 2003 and December, 31 2011, and concomitantly started statin treatment were identified. Within the first year of treatment, we evaluated therapeutic changes, adherence as MPR (medication possession ratio), persistence as continuous drug coverage without gaps ≥ 60 days, and influencing factors using log binomial models.

RESULTS Of 1,404 patients, 42.4% were initially treated with a high-efficacy statin. 23.4% of patients showed at least one treatment change. Mean MPR was 68.7% (29.9), and patients showing continued statin use were 47.0%. Therapy modification was significantly associated with a past cardiovascular event (relative risk, RR [95% confidential interval] 2.28 [1.69-3.09]) and at least one lipid test (RR 1.82 [1.31-2.53]). MPR $\geq 80\%$ was significantly associated with the first statin prescribed (atorvastatin RR 1.80 [1.25-2.60] and rosuvastatin RR 1.55 [1.22-2.35], vs simvastatin), a past cardiovascular event (RR 2.60 [1.30-5.20]), at least one therapy change (RR 1.86 [1.43-2.41]), at least a lipid test (RR 1.71 [1.27-2.31]). A similar pattern was observed for persistence.

CONCLUSIONS This analysis of young adult HeFH patients showed that therapy change was quite frequent, and probably reflected adjustments according to individual response. Adherence and persistence were inadequate, even in this population at high cardiovascular risk, and they need to be improved through proper patient education and shared treatment decision-making approach.