

Undiagnosed celiac disease in women with recurrent reproductive failure



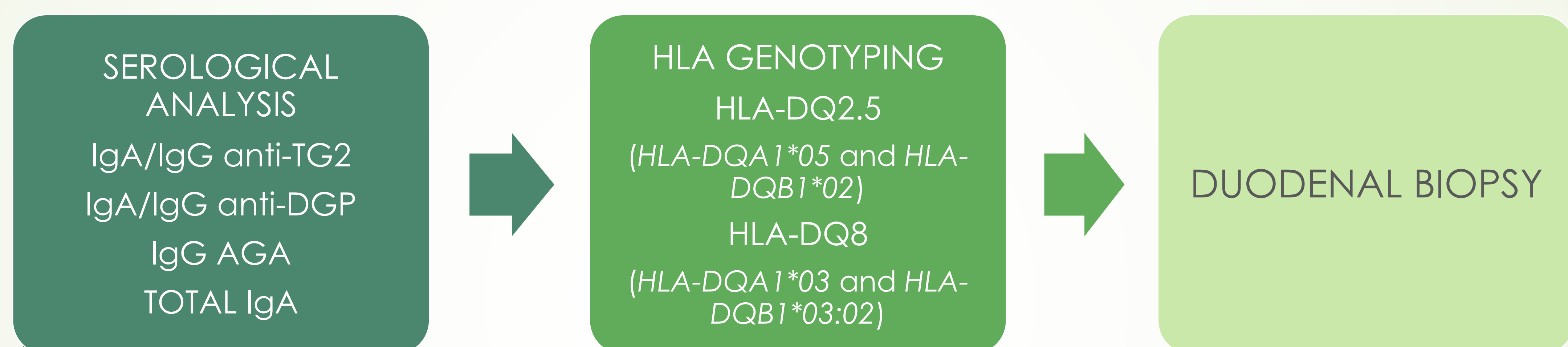
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INTRODUCTION AND OBJECTIVES

Infertility can be present as a complication of non-diagnosed celiac disease (CD), but its relevance is still under debate. We aimed to evaluate the impact of CD screening in women with reproductive failure in a real life scenario.

METHODS

We consecutively recruited 690 Spanish women who attended a specialist infertility clinic due to unexplained history of recurrent miscarriage and/or recurrent implantation failure. IgA anti-transglutaminase 2 (TG2) antibody data were collected from all participants, accompanied of IgG anti-TG2 and IgA/IgG anti-deamidated gluten peptides (DGP) data in most cases, and occasionally of IgG anti-gliadin (AGA) antibodies. In selected cases, HLA-DQ genotyping was requested. Biopsy was suggested to all women with positive serological results or belonging to CD risk groups.



RESULTS

IgA anti-TG2 antibodies were found in 1% of the studied women, all with HLA-DQ2.5 but one with non-risk HLA genetics. This percentage increased to 4% when considering positive results for IgA/G anti-TG2 or anti-DGP, and 5.5% when also considering AGA. CD was discarded in 18% of seropositive women (7 patients) after HLA study and in 21% (8 women) after duodenal biopsy, although only 39% of the seropositive women underwent a biopsy. In addition, 3 seronegative women showed CD-compatible intestinal changes. A gluten free diet (GFD) was initiated by many patients prior to firm diagnosis.

Table 1. Distribution of HLA-DQ heterodimers and intestinal histological findings in seropositive women.

HLA risk	IgA anti-TG2 N=7	IgG anti-DGP N=13	IgG anti-TG2 N=3	IgA anti-DGP N=6	IgG anti-gliadin N=9
HLA-DQ2.5	6 ^{*(3)}	3 ^{*(1)}	2 ^{#(1)}	2	5 ^{*(1)} ^{** (1)} ^{#(1)}
HLA-DQ8	0	2 ^{#(1)}	0	0	0
HLA-DQ2.2	0	3 ^{#(1)}	0	2 ^{** (1)} ^{#(1)}	1 ^{#(1)}
HLA-DQ7.5	0	0	0	1	1 ^{#(1)}
Non-risk	1	4	1	1 ^{#(1)}	0
HLA missing data	0	1	0	0	2 ^{*(1)}
CD discarded	1	6	2	2	3
Possible CD	3	6	1	3	3
CD confirmed	3	1	0	1	3

The number of women displaying each histological finding is shown between brackets. ^{*}Villous atrophy; ^{**}Intraepithelial lymphocytosis; [#]Normal biopsy.

CONCLUSION

A wide serological study helps to identify patients with CD and reproductive problems, but HLA should be evaluated after a positive result to reduce unnecessary biopsies. Diagnosis always must be completed with duodenal biopsy.

Authors declare no conflict of interests

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