Cardiomyopathy in adults

Bibliographic reference	**Chicco et al. (2010)**
Study type	Cross-sectional survey
Study quality	The Joanna Briggs Institute Prevalence Critical Appraisal Tool (http://ijhpm.com/article_2870_607.html) 1. Was the sample representative of the target population? YES 2. Were study participants recruited in an appropriate way? NO – Unclear is consecutive sample recruited 3. Was the sample size adequate? YES 4. Were the study subjects and the setting described in detail? YES 5. Was the data analysis conducted with sufficient coverage of the identified sample? YES 6. Were objective, standard criteria used for the measurement of the condition? YES 7. Was the condition measured reliably? YES 8. Was there appropriate statistical analysis? YES 9. Are all important confounding factors/subgroups/differences identified and accounted for? YES 10. Were subpopulations identified using objective criteria? NA Overall risk of bias = MODERATE
Country	Italy
Number of patients	N=104 adults with idiopathic dilated cardiomyopathy N=63 diseased controls N=101 healthy controls
Study population	Inclusion: adults patients with idiopathic dilated cardiomyopathy who underwent screening between April 2007 and February 2008 Characteristics of those with idiopathic dilated cardiomyopathy: 59 males/45 females, median 52 years (range 28-61)
Control	Diseased controls: 43 males/20 females, median 59 years (range 39-72) Healthy controls: apparently healthy nurses and residents working in cardiology or paediatric departments: 60 males/41 females,

	median 40 years (range 27-50)
Details of coeliac testing	IgA anti-tTG (Eu-tTG Quick, Eurospital, Italy) IgA and IgG serum (ELISA, Eu-tTG IgG, human IgA, Eurospital, Italy) EMA IgA (immunofluorescence assay on human umbilical cord cryosections) Biopsy for all with positive anti-tTG or EMA
Results	2.9% (3/104) with idiopathic dilated cardiomyopathy had biopsy-confirmed CD (Marsh type IIIc; 2 males, 1 female) 0% (0/63) diseased controls 1% (1/101) of controls had biopsy-confirmed CD (Marsh type IIIc)
Source of funding	Institute of Child Health IRCCS “Burlo Garofolo” Trieste
Conflicts of interest	Not reported
Comments	

Definitions of abbreviations are given at the end of this document.

Bibliographic reference	**de Menzes et al. (2012**
Study type	Cross-sectional survey
Study quality	The Joanna Briggs Institute Prevalence Critical Appraisal Tool (http://ijhpm.com/article_2870_607.html) 1. Was the sample representative of the target population? YES 2. Were study participants recruited in an appropriate way? NO – Unclear is consecutive sample recruited 3. Was the sample size adequate? YES 4. Were the study subjects and the setting described in detail? YES 5. Was the data analysis conducted with sufficient coverage of the identified sample? YES 6. Were objective, standard criteria used for the measurement of the condition? YES 7. Was the condition measured reliably? YES 8. Was there appropriate statistical analysis? YES 9. Are all important confounding factors/subgroups/differences identified and accounted for? YES 10. Were subpopulations identified using objective criteria? NA Overall risk of bias = MODERATE
Country	Brazil
Number of patients	N=56 children and adolescents with dilated cardiomyopathy or myocarditis
Study population	Inclusion: children and adolescents with a clinical diagnosis of dilated cardiomyopathy or myocarditis who were seen at a paediatric

	cardiology service between December 2009 and November 2010; children were older than 1 (to ensure gluten exposure) Exclusion: previous CD diagnosis Median age 96 months (from 12 to 225 months / 1 and 18 years) 57% (32) female
Control	None
Details of coeliac testing	EMA IgA (Immco Diagnostics, Genbiotech; > 20 U/ml were positive) tTG IgA (Orgentec, Diagnostika; > 10 U/ml were positive) Serum IgA was also determined to rule out IgA deficiency intestinal biopsy if positive serology
Results	Only one had tTGA serum positive levels and also had intraepithelial lymphocytosis and total villous atrophy. 1.8% (95% CI 0.04-9.5%) were biopsy-confirmed CD
Source of funding	Not reported
Conflicts of interest	Study reports none related to this article
Comments	

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Bibliographic reference	**Frustaci et al. (2002)**
Study type	Case-control
Study quality	The Joanna Briggs Institute Prevalence Critical Appraisal Tool (http://ijhpm.com/article_2870_607.html) 1. Was the sample representative of the target population? YES 2. Were study participants recruited in an appropriate way? Yes (consecutive sample recruited) 3. Was the sample size adequate? YES 4. Were the study subjects and the setting described in detail? YES 5. Was the data analysis conducted with sufficient coverage of the identified sample? YES 6. Were objective, standard criteria used for the measurement of the condition? YES 7. Was the condition measured reliably? YES 8. Was there appropriate statistical analysis? YES 9. Are all important confounding factors/subgroups/differences identified and accounted for? YES 10. Were subpopulations identified using objective criteria? NA

	Overall risk of bias = LOW
Country	Italy
Number of patients	N=187 adults
Study population	Inclusion: consecutive patients with myocarditis admitted with either heart failure (N=110), with cardiac arrhythmias (N=77), N=118 male, mean age 41.7±14.3yrs, none had IgA deficiency
Control	none
Details of coeliac testing	
Results	N=13 +ve IgA-tTG N=9 +ve for AEA and had iron-deficiency anaemia and had histologic evidence of coeliac disease Prevalence of coeliac disease 4.4% with myocarditis vs. N=1 (0.3%), p<0.003
Source of funding	MURST project
Conflicts of interest	
Comments	

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Bibliographic reference	**Vizzardi et al. (2008)**
Study type	Cross-sectional data from case series
Study quality	The Joanna Briggs Institute Prevalence Critical Appraisal Tool (http://ijhpm.com/article_2870_607.html) 1. Was the sample representative of the target population? YES 2. Were study participants recruited in an appropriate way? Yes (Consecutive sample recruited) 3. Was the sample size adequate? YES 4. Were the study subjects and the setting described in detail? YES 5. Was the data analysis conducted with sufficient coverage of the identified sample? YES 6. Were objective, standard criteria used for the measurement of the condition? YES 7. Was the condition measured reliably? YES 8. Was there appropriate statistical analysis? YES 9. Are all important confounding factors/subgroups/differences identified and accounted for? YES

	10. Were subpopulations identified using objective criteria? NA Overall risk of bias = LOW
Country	Italy
Number of patients	N=350 with idiopathic or ischaemic dilated cardiomyopathy
Study population	Patients: consecutive patients referred to the Heart Failure Centres of the Cardiology Department of a hospital from April to December 2005 who were unaware of a CD diagnosis at enrolment N=182 idiopathic dilated cardiomyopathy; mean 52 ± 12 years; 128 male, 54 female N=168 ischaemic dilated cardiomyopathy; mean 64 ± 14 years; 130 male, 38 female (patients were significantly different in terms of age [p<0.0001] and ejection fraction [p<0.005])
Control	none
Details of coeliac testing	tTG antibody (CELIKEY^{TM} with human recombinant antigen, Pharmacia&Upjohn, Sweden; > 7 U/ml cut-off value) and EMA (immunofluorescence on monkey oesophagus slides, Antiendomysium®, Eurospital, Italy) for those tTG positive Biopsy for those serologically positive (using Marsh classification)
Results	0**.6% (2) tested positive for tTG and EMA antibodies; both patients had complete villous atrophy on biopsy** Both had been on optimized therapy for heart failure for > 2 years
Source of funding	Not reported
Conflicts of interest	Not reported
Comments	

Definitions of abbreviations are given at the end of this document.