



Sars-CoV2 e autoimmunità: risultati di uno studio osservazionale monocentrico

Dott.ssa Macchini Cristina

Medico in formazione specialistica in Medicina Interna

Prof. Michele Maria Luchetti Gentiloni

Dirigente Medico e Professore Associato

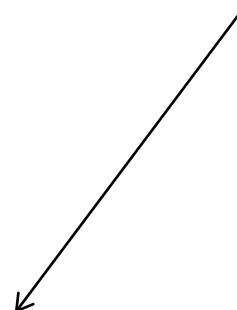
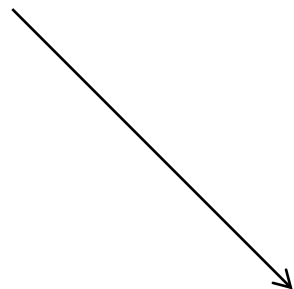
Università Politecnica delle Marche

AOU Ospedali Riuniti Ancona

Introduzione

Infezione Sars-Cov2

Vaccino anti Covid-19



Flare o nuova insorgenza di patologie
immunomediate

**Immune-Mediated Disease Flares or New-Onset Disease in
27 Subjects Following mRNA/DNA SARS-CoV-2 Vaccination**

AbdullaWatad , Gabriele De Marco et all

Popolazione di studio

```
graph TD; A[Popolazione di studio] --> B1[A. 584]; A --> B2[B. 184]; A --> B3[C. 12]; A --> B4[D. 22]; B1 --> C1[Pazienti ricoverati nel reparto COV4 Ospedali Riuniti di Ancona]; B2 --> C2[Pazienti valutati post-dimissione a 6 mesi]; B3 --> C3[Pazienti ambulatoriali post infezione]; B4 --> C4[Pazienti post-vaccino anti SarsCov2];
```

A. 584

Pazienti
ricoverati nel
reparto COV4
Ospedali Riuniti
di Ancona

B. 184

Pazienti
valutati post-
dimissione a 6
mesi

C. 12

Pazienti
ambulatoriali
post infezione

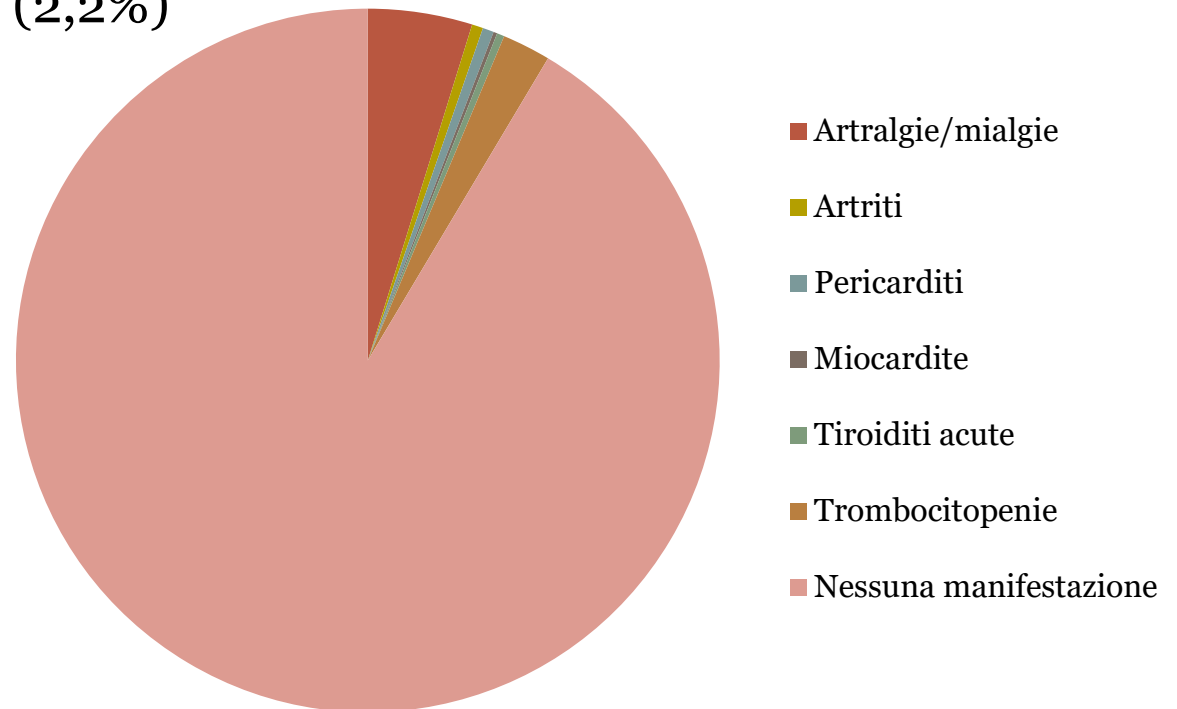
D. 22

Pazienti post-
vaccino anti
SarsCov2

Obiettivo dello studio: valutare incidenza di manifestazioni cliniche e laboratoristiche immunitarie correlate a infezione da SarsCoV2 o vaccinazione anti-SarsCoV2

COORTE A → 584 pazienti

- n. 28 artralgie e mialgie (4,8%)
- n. 2 artriti (0,3%)
- n. 3 pericarditi (0,5%)
- n. 1 miocardite (0,2%)
- n. 2 tiroiditi acute (0,3%)
- n. 12 trombocitopenie (2,2%)

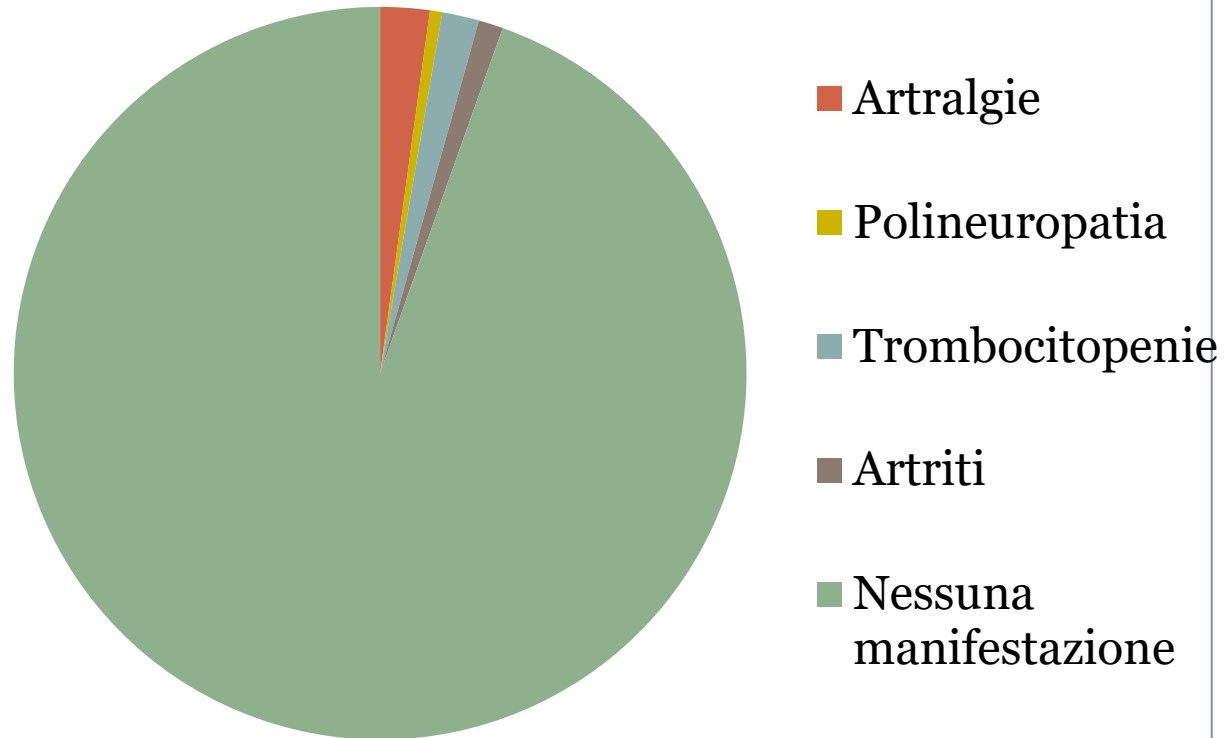


INDUCTION OF ACUTE IMMUNOMEDIATED MANIFESTATIONS BY SARS-COV-2 INFECTION

Case	Age	Sex	Clinical Presentation	Immunological Test	Therapy	Outcome
M.R.	56y	male	Arthritis of the I MTF	Absence of RF or anti-CCP	Prednison	Remission in 2wks
M.L. B.	86y	female	Arthritis of the I MTF	Absence of RF or anti-CCP	Prednison	Remission in 2wks
I.G.	82y	female	Pericarditis	Absence of RF, anti-CCP, ANA, ENA, antiDNA	Prednison	
M.O.	67y	female	Pericarditis	Absence of RF, anti-CCP, ANA, ENA, antiDNA	Prednison	
Y.F.	35y	female	Pericarditis	Absence of RF, anti-CCP, ANA, ENA, antiDNA	Prednison	
M.K. P.		female	Myocarditis, severe, in hystory of undifferentiated connectivitis.	Absence of RF, anti-CCP, ANA, ENA, antiDNA	Prednison for 4 months Mofetil micofenolato	
M.G. D.E. P.M. M.D. F.P. I.M.R . C.R.	58y 45y 57y 63y 62y 47y 74y	male	Leukopenia + thrombocytopenia Pancytopenia Pancytopenia Thrombocytopenia Thrombocytopenia Thrombocytopenia Thrombocytopenia, severe; anemia; Lymphopenia	Absence of ANA, ENA, antiDNA	Prednison	Remission in 2-4wks
S.G. F.E.K . M.B.	42y 72y 66y 60y	female	Pancytopenia Thrombocytopenia + Anemia Thrombocytopenia in hystory of PTI	Absence of ANA, ENA, antiDNA	Prednison	Remission in 2-4wks

COORTE B → 184 pazienti

- n. 4 artralgie (2%)
- n. 2 artriti (1,2%)
- n. 1 polineuropatia (0,5%)
- n. 3 trombocitopenie (1,6%)

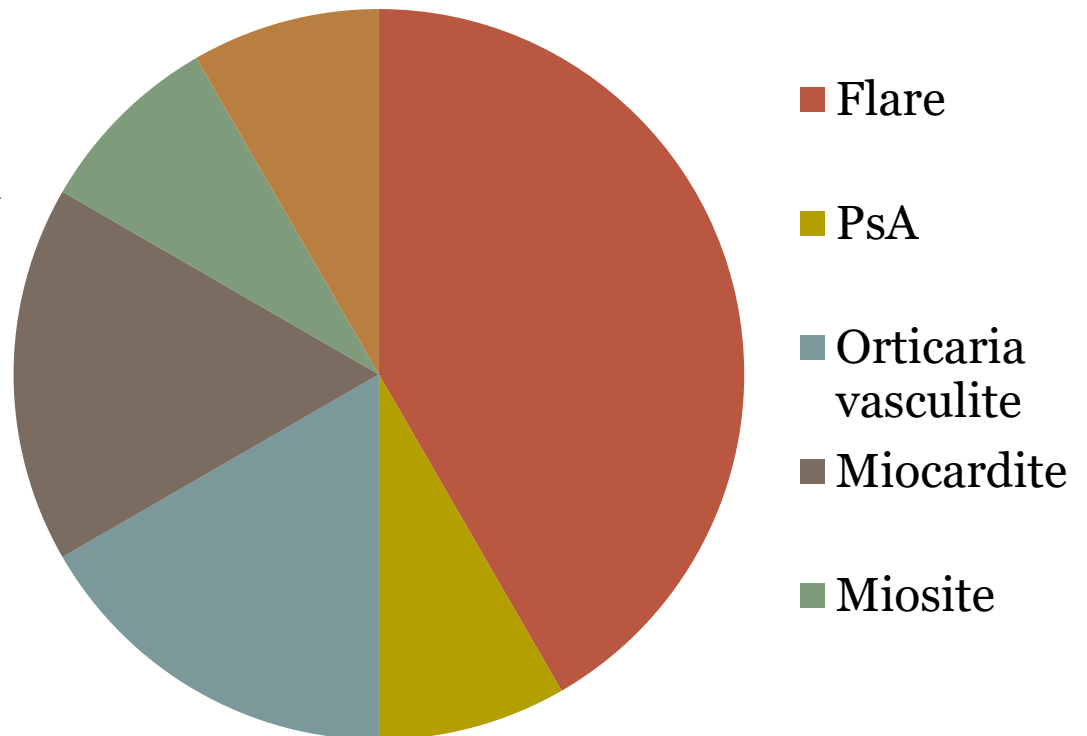


INDUCTION OF CHRONIC IMMUNOMEDIATED MANIFESTATIONS BY SARS-COV-2 INFECTION (FOLLOW UP)

Case	Age	Sex	Clinical Presentation	Instrumental Test	Therapy	Outcome
G.V.	74 y	male	Polineuropaty (EMG)	ERS 30, D-Dimero 440; Absence of RF, anti-CCP, ANA, ENA, antiDNA, ANCA, cryoglobulins; C3 and C4 normal	Prednison + Gabapentin	Partial remission in 6wks
M.R.D	49 y	female	Synovitis of left ankle	Absence of RF, anti-CCP, ERS and CRP negative	Prednison	Partial remission in 8 wks
G.G.	54 y	male	Ax SpA	Absence of RF, anti-CCP, ERS and CRP negative, HLA-B27 in progress	NSAID	Partial remission in 8 wks

COORTE C → 12 pazienti

- n. 3 flare PsA
- n. 1 flare spondilite anchilosante
- n. 1 flare artrite reumatoide
- n. 1 PsA
- n. 2 orticaria vasculite
- n. 2 miocarditi
- n. 1 miosite
- n. 1 poliartrite simmetrica



INDUCTION OF IMMUNO-MEDIATED DISEASES BY SARS-COV-2 INFECTION

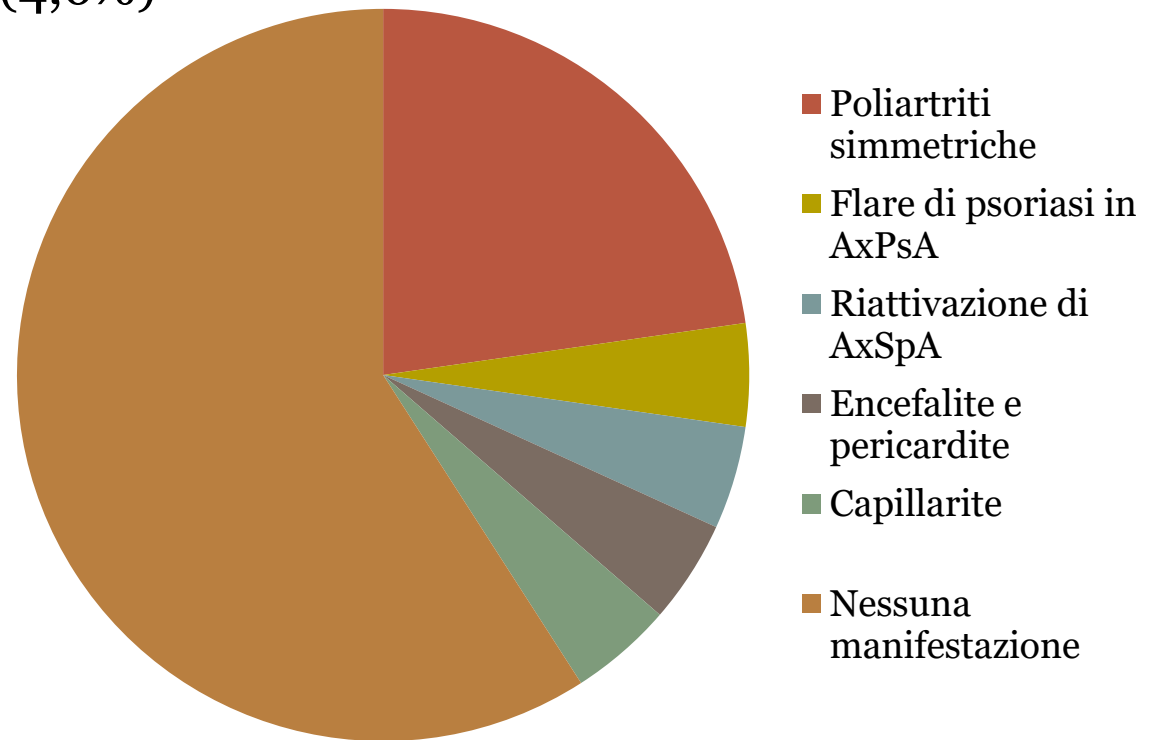
Case	Age	Sex	Clinical Presentation	Immunological Test	Therapy	Outcome
M.B.	52 y	male	PsA (I diagnosis) in pt with familiar PsO	ESR and CRP normal	Prednison + MTX	Remission in 3mts
C.G.	39 y	male	Urticaria Vasculitis	ESR 70, CRP 3; Absence of RF, anti-CCP, ANA, ENA, ANCA Biopsy: vasculitis with infiltration of neutrophils/eosinophyls	Prednison	Remission in 4mts
O.M.C.	54y	female		ESR and CRP normal; Absence of RF, anti-CCP, ANA, ENA, antiDNA Biopsy: leukoclastic vasculitis	Prednison	Remission in 3mts
P.M.	55 y	female	Myocarditis in pt with Rheumatoid Arthritis	ESR and CRP normal; Absence of RF, anti-CCP, ANA, ENA, antiDNA	Prednison +bDMARD	Remission in 3wks
M.K.P.	47 y		Myocardio/pericarditis in pt with Undifferentiated Connectivitis	ESR and CRP normal; Absence of RF, anti-CCP, ANA, ENA, antiDNA	Prednison for 2 mts Mofetil-micofenolato	Remission in 6mts
F.M.	82 y	female	Myositis	Absence of ANA, ENA, antiDNA; CK 660	Prednison	Remission in 2mts
L.R.	56 y	female	Polyarthrititis, symmetric, of the small joints	RF 34 (normal<16); anti-CCP, ANA 1/160, ENA, antiDNA normal RF, anti-CCP, ANA, ENA, antiDNA normal	Prednison	Remission in 4wks

FLARE OF IMMUNO-MEDIATED DISEASES BY SARS-COV-2 INFECTION

Case	Age	Sex	Clinical Presentation	Immunological Test	Therapy	Outcome
L.B.	54 y	female	Flare of PsA	ESR 45, CRP 5	Prednison + bDMARD	Remission in 4wks
R.B. E.G.	53 y 29 y	female	Flare of SpA/IBD	ESR 65, CRP 8 ESR and CRP normal	Prednison + bDMARD	Remission in 3wks
M.I.	61 y	female	Flare of Ankylosis Spondylitis	Absence of RF, anti-CCP, ANA, ENA, ANCA	Prednison+bDMARD	Remission in 6wks
A.M.T.	83 y	female	Flare of Rheumatoid Arthritis	ESR 85, CRP 18; Absence of RF, anti-CCP	Prednison+bDMARD	Remission in 6wks

COORTE D → 22 pazienti

- n. 5 poliartriti simmetriche (22,73%)
- n. 1 flare di psoriasi in AxPsA (4,6%)
- n. 1 riattivazione di AxSpA (4,6%)
- n. 1 encefalite e pericardite (4,6%)
- n. 1 capillarite palmare (4,6%)



INDUCTION OF IMMUNO-MEDIATED DISEASES BY SARS-COV-2 VACCINATION

Case	Age	Sex	Clinical Presentation	Immunological Test	Therapy	Outcome
P.F.	71y	female	Polyarthriti s, symmetric, of the small joints	ESR and CRP normal	Prednison	Remission in 4wks
S.F.	72y	male	Enthesiti s/tenosynoviti s of the shoulder; Polyarthriti s, symmetric, of the small joints Asymptomatic	ESR 84, CRP 3; Fibrinogen 701, d-dimers 9427, PCR 16,29 ESR 36, CRP normal; Fibrinogen 545, d-dimers 684	Prednison + Enoxaparin 4000 UI/day	Remission in 8wks
A.M.	78 y	female	Capillariti s of the palmar surface	Absence of RF, anti-CCP, ANA, ENA, ANCA	Prednison	Active
S.M.	38 y	female	Encephaliti s (MRI) Pericarditi s at follow up at 2 months	ANA 1/160-320 ANA 1/160-320 Absence of RF, anti-CCP, ENA, ANCA	Prednison + Colchicin	Remission in 3wks Minimal disease activity
R.T.	61 y	male	Polyarthriti s, symmetric, of the small joints	ESR normal, CRP 27,7; Absence of ANA, ENA, antiDNA; CK 660	Prednison	Remission in 1mts
L.M.G.	68 y		Polyarthriti s, symmetric, of the small joints	ESR 73, CRP 2.7; Absence of RF, anti-CCP, ANA, ENA, ANCA		Remission in 3wks

L.M.G



Dopo terapia con prednisone per
4 settimane



FLARE OF IMMUNO-MEDIATED DISEASES BY SARS-COV-2 VACCINATION

Case	Age	Sex	Clinical Presentation	Immunological Test	Therapy	Outcome
G.I.		female	Flare of Pso in Ax-PsA	ESR and CRP normal	Prednison + bDMARD	Remission in 3mts
R.F.	50 y	female	Flare of Ax-PsA (arthritis) with intestinal inflammation	ESR normal, CRP 6.8	Prednison + bDMARD	Remission in 3wks

Conclusioni

- L'infezione da SarsCoV2 è in grado di stimolare reazioni immunologiche complesse e polimorfe.
- La vaccinazione anti-SarsCoV2 può causare manifestazioni simili per clinica e frequenza al COVID-19 → anticorpi anti-spike ruolo chiave.
- In quasi la totalità dei casi sono assenti alterazioni dell'autoimmunità sierologica.

Grazie per l'attenzione