

IX CONGRESSO NAZIONALE ECOCARDIOCHIRURGIA 2017

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SIMPOSIO

**ENDOCARDITE: UNA PATOLOGIA GRAVATA ANCORA DA UN'ALTA MORTALITÀ E SULLA
QUALE C'È ANCORA MOLTO DA IMPARARE**

Il cardiologo ecocardiografista nell'heart team dell'Endocardite

(... il "non problema" della selezione delle richieste)

Laura Massironi

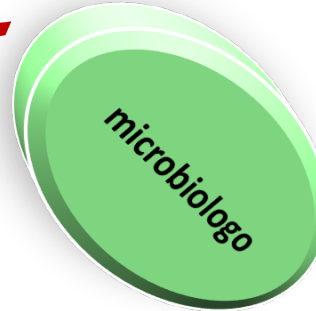
“Endocarditis team”



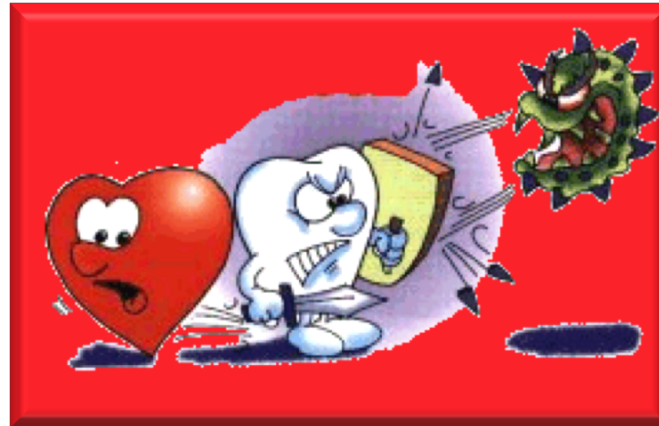
internista



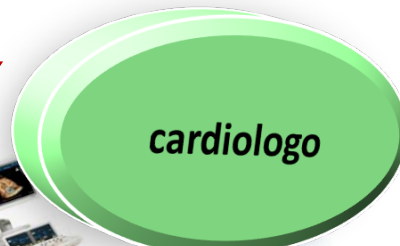
infettivologo



microbiologo



Radiologo
med.nucleare



cardiologo



cardiochirurgo





2015 ESC Guidelines for the management of infective endocarditis

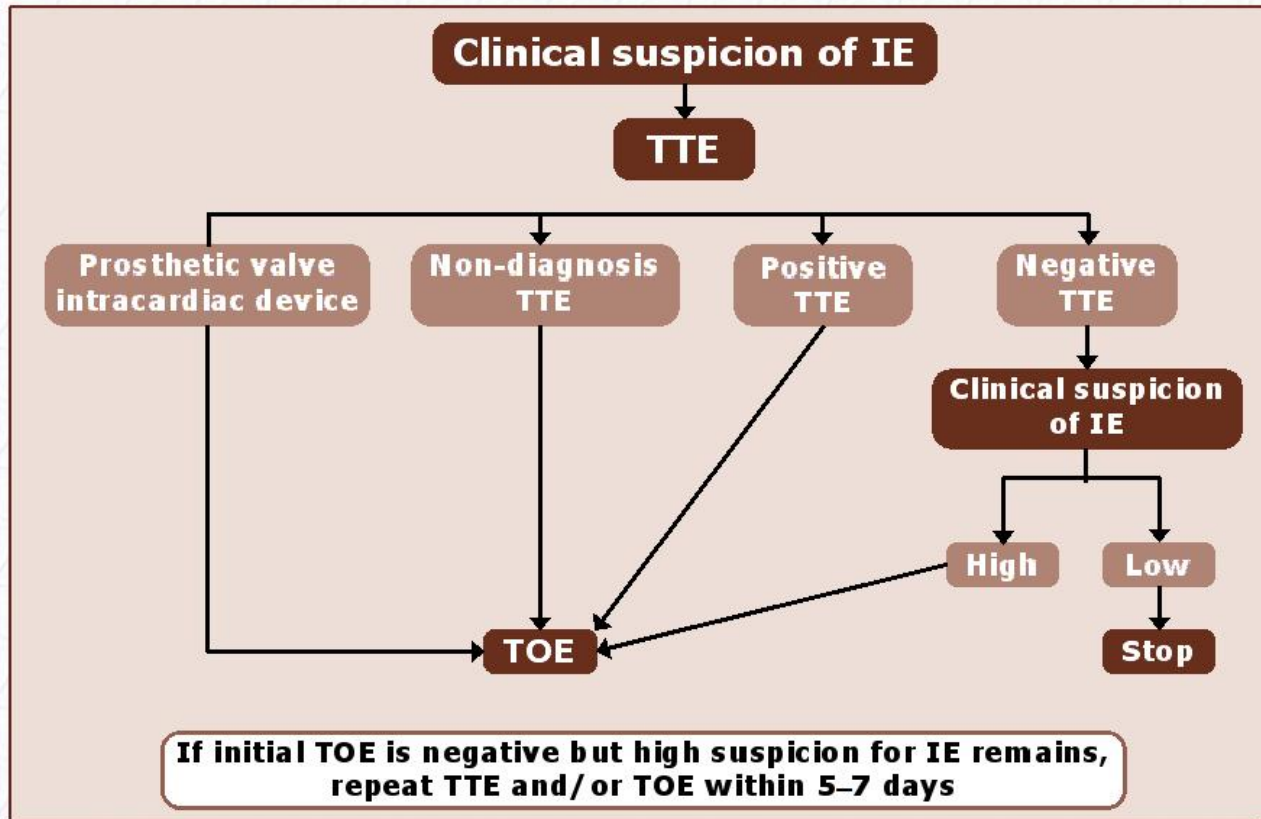
The Task Force for the Management of Infective Endocarditis of the European Society of Cardiology (ESC)

Imaging, **particularly echocardiography**, plays a **key role** in both the diagnosis and management of IE. Echocardiography is also useful for the prognostic assessment of patients with IE, for its follow-up under therapy and during and after surgery

5.3.1 Echocardiography

Echocardiography, either transthoracic echocardiography (TTE) or TOE, is the technique of choice for the diagnosis of IE, and plays a key role in the management and monitoring of these patients. **Echocardiography must be performed as soon as IE is suspected.**

Indications for echocardiography



ESC 2015 modified criteria for diagnosis of IE:

Major criteria

1. Blood cultures positive for IE

- a. Typical microorganisms consistent with IE from 2 separate blood cultures:
 - *Viridans streptococci*, *Streptococcus gallolyticus* (*Streptococcus bovis*), *HACEK group*, *Staphylococcus aureus*; or
 - Community-acquired enterococci, in the absence of a primary focus; or
- b. Microorganisms consistent with IE from persistently positive blood cultures:
 - ≥ 2 positive blood cultures of blood samples drawn >12 h apart; or
 - All of 3 or a majority of ≥ 4 separate cultures of blood (with first and last samples drawn ≥ 1 h apart); or
- c. Single positive blood culture for *Coxiella burnetii* or phase I IgG antibody titre $>1:800$

2. Imaging positive for IE

- a. Echocardiogram positive for IE:
 - Vegetation
 - Abscess, pseudoaneurysm, intracardiac fistula
 - Valvular perforation or aneurysm
 - New partial dehiscence of prosthetic valve
- b. Abnormal activity around the site of prosthetic valve implantation detected by ^{18}F -FDG PET/CT (only if the prosthesis was implanted for >3 months) or radiolabelled leukocytes SPECT/CT.
- c. Definite paravalvular lesions by cardiac CT.

www.escardio.org

European Heart Journal (2015);36:3075-3123 - doi:10.1093/eurheartj/ehv319

Definite IE

Pathological criteria

- Microorganisms demonstrated by culture or on histological examination of a vegetation, a vegetation that has embolized, or an intracardiac abscess specimen; or
- Pathological lesions; vegetation or intracardiac abscess confirmed by histological examination showing active endocarditis

Clinical criteria

- 2 major criteria; or
- 1 major criterion and 3 minor criteria; or
- 5 minor criteria

Possible IE

- 1 major criterion and 1 minor criterion; or
- 3 minor criteria

Rejected IE

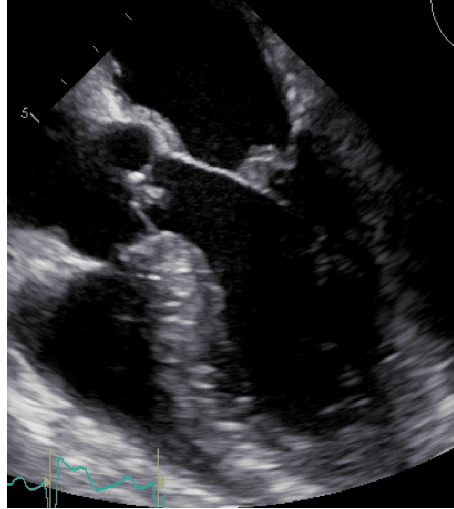
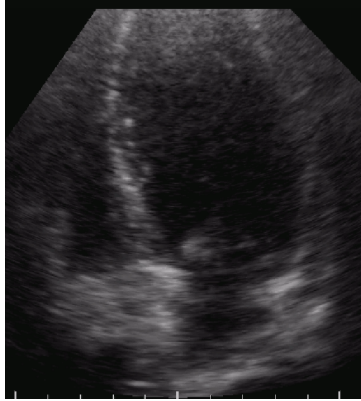
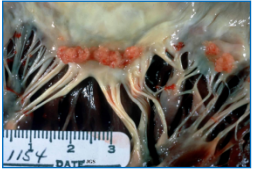
- Firm alternate diagnosis; or
- Resolution of symptoms suggesting IE with antibiotic therapy for ≤ 4 days; or
- No pathological evidence of IE at surgery or autopsy, with antibiotic therapy for ≤ 4 days; or
- Does not meet criteria for possible IE, as above

Anatomic and echographic definitions

	ECHO	Anatomia
Vegetazione	Massa +/- mobile adesa all'endocardio valvolare o a materiale protesico	Massa infetta adesa all'endocardio valvolare o a materiale protesico
Ascesso	Cavità perivalvolare di aspetto ecodenso, disomogeneo	Cavità perivalvolare a contenuto necrotico-purulento non comunicante con il lume cardiovas.
Pseudoaneurisma	Cavità perivalvolare pulsatile, con flusso al color doppler	Cavità perivalvolare comunicante con il lume cardiovascolare
Perforazione	Interruzione endocardio valv. attraversato da flusso al color-doppler	Interruzione della continuità del tessuto endocardico
Fistola	Evidenza al color-D di flusso tra due cavità contigue attraverso una perforazione	Comunicazione tra due cavità contigue attraverso una perforazione
Deiescenza di protesi valvol.	Evidenza di ampio rigurgito paravalvolare con o senza movim. di basculazione della protesi	Deiescenza protesica

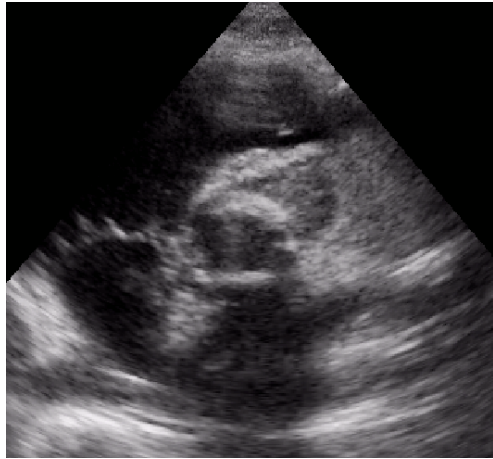
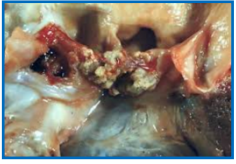
...vegetazioni...

♀ febbre dddd - ↑↑ indici infiammatori – nessun riferimento d'organo



... **ascesso** ...

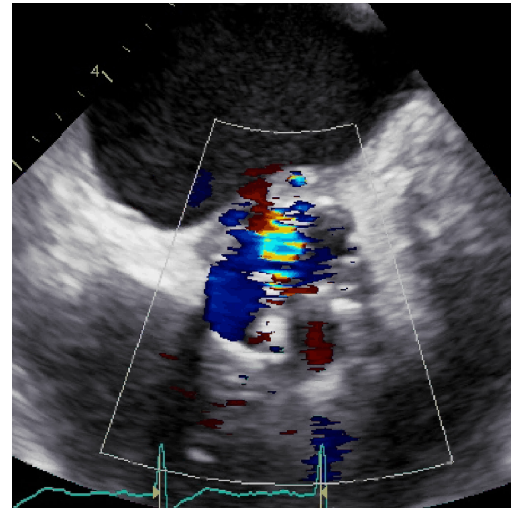
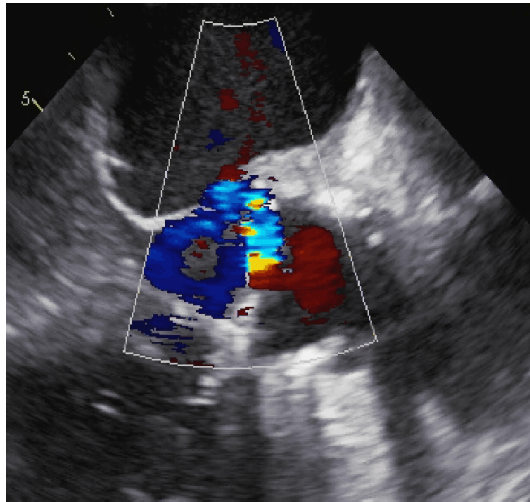
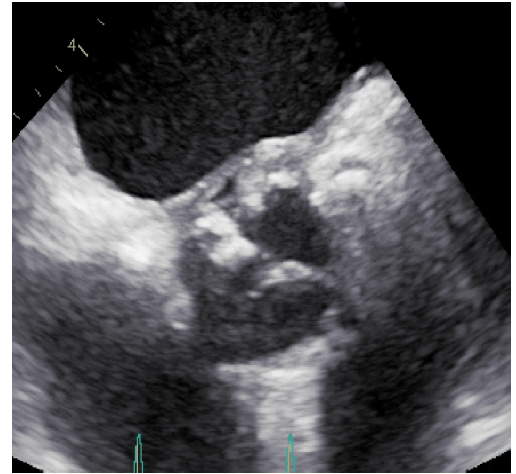
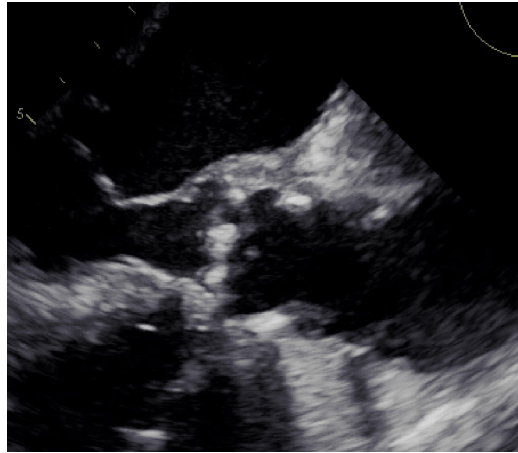
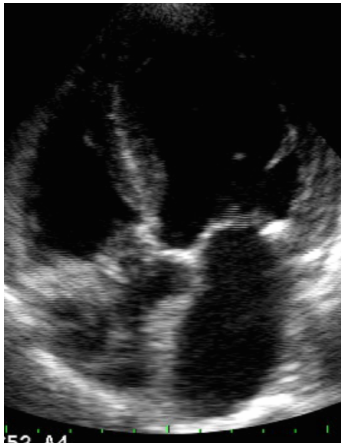
♂ shock settico – recente CCH: impianto di protesi biologica in sede aortica per EI



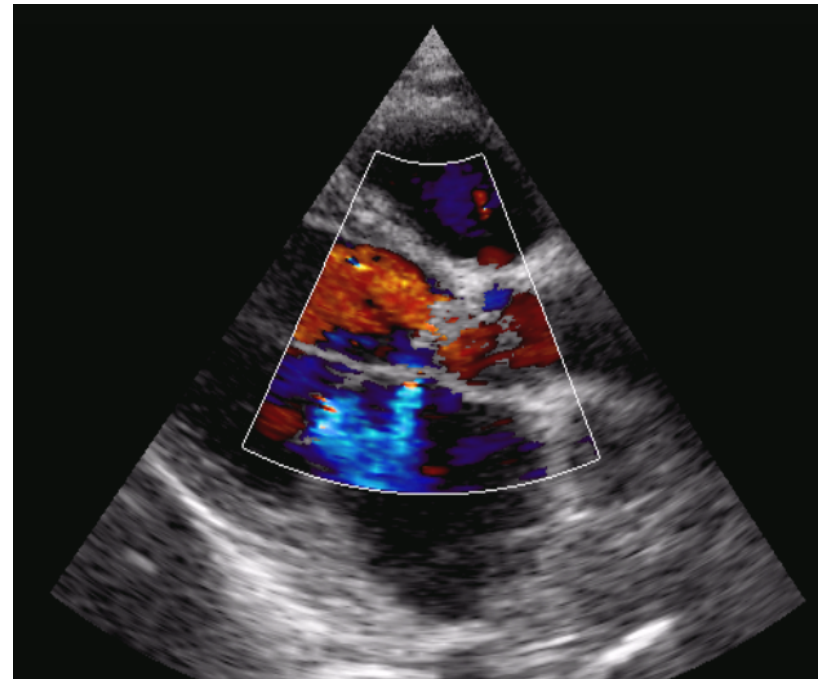
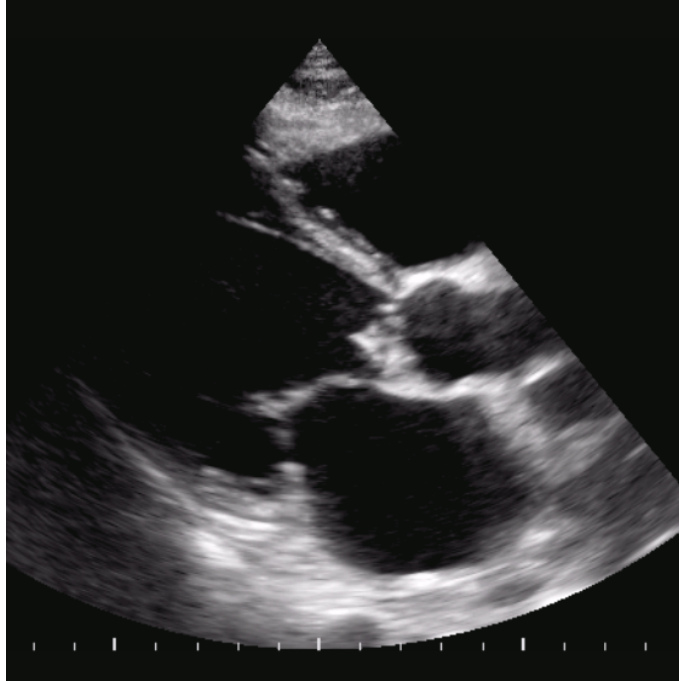
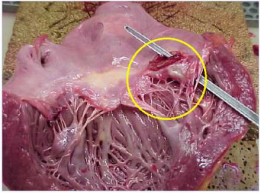
...pseudoaneurisma...

♀ febbre dndd - ↑↑ indici infiammatori – nessun riferimento d'organo

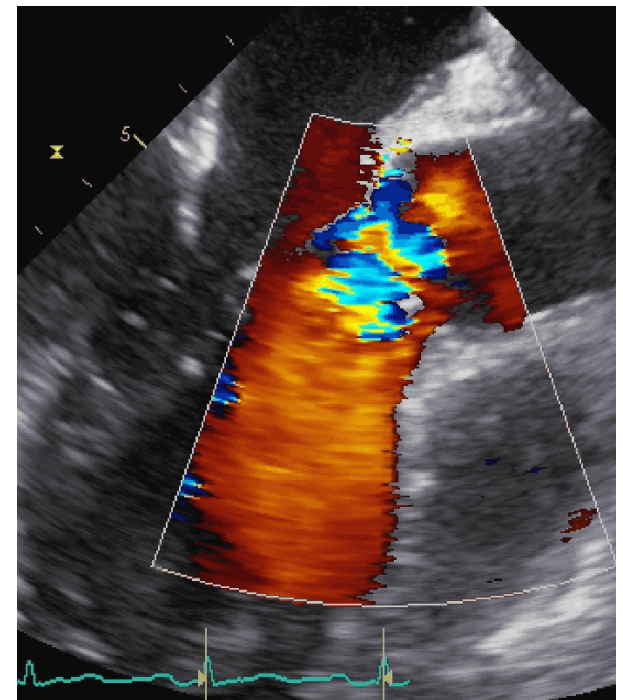
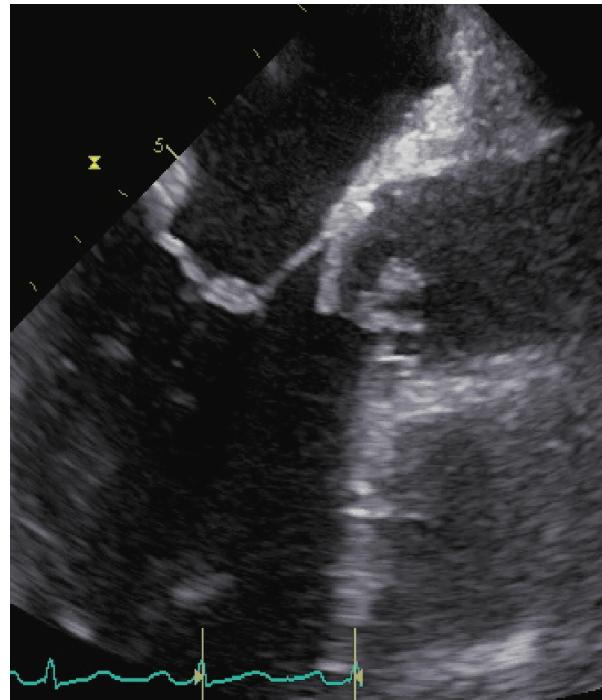
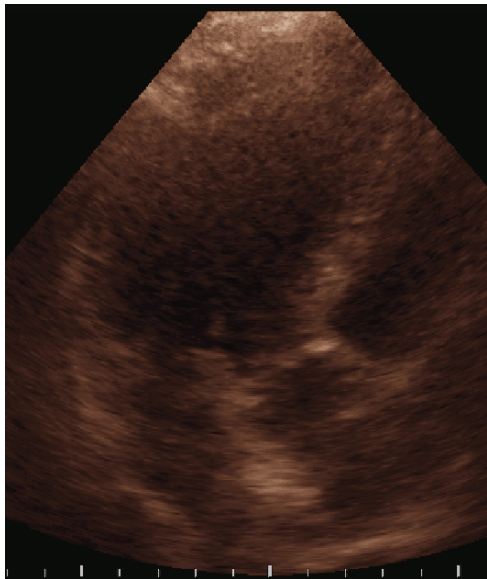
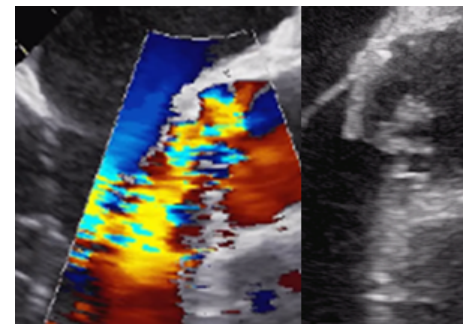
.... mancata risposta clinica alla tpAB – progressivo deterioramento clinico



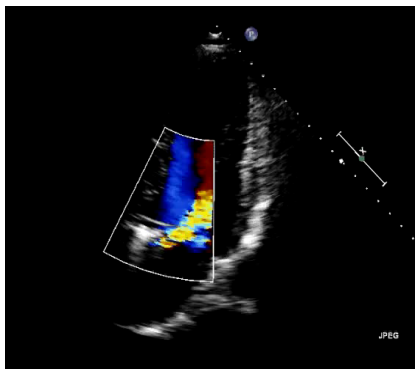
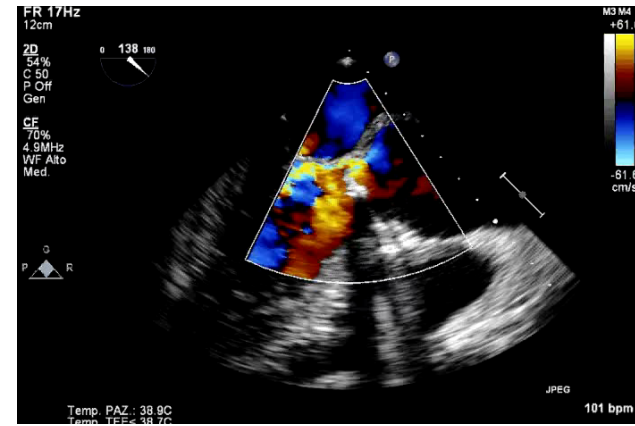
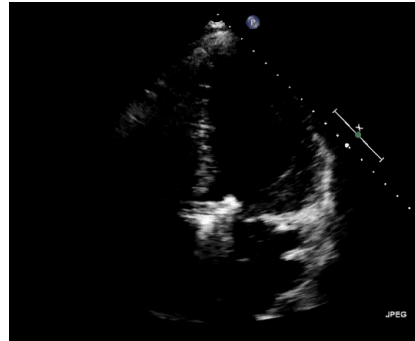
...perforazione ...



...perforazione ... ♂ febbre settica – soffio “non noto”



...deiescenza di protesi...



Grazie

