

# Endocarditis Prophylaxis

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# ESC 2015 algorithm for IE Dx

Clinical suspicion of IE



Modified Duke Criteria



Definite IE

Possible IE

Low



# ESC 2015 algorithm for IE DX



Native valve

Prosthetic valve



Repeat ECHO, Imaging, CT



ECHO,

# ESC 2015 Algorithm Dx

- Repeat ECHO,
- PET/CT
- Cardiac CT
- Imaging for embolic events

# Prevention

- New guidelines propose continuing to limit antibiotic prophylaxis to patients at high risk of Infective endocarditis undergoing the highest risk dental procedures
- They highlight the importance of hygiene measures in particular oral and cutaneous hygiene

# Prevention

- Good oral hygiene and regular dental review are more important than antibiotic prophylaxis to reduce the risk of IE
- Aseptic measures are mandatory during venous catheter manipulation and during any invasive procedure in order to reduce the rate of health-care IE

# Prevention

- When indicated in other conditions they should be given in a single daily dose
- New antibiotics regimens have emerged in the treatment of Staphylococcal IE, including Daptomycin and combination of high doses Cotrimoxazole and Clindamycin

# Cardiac conditions at highest risk for IE

## Recommendation

Antibiotic prophylaxis should be considered for patients at highest risk for IE :

- 1) Patients with any prosthetic valve, including a transcatheter valve, whom any prosthetic material was used for cardiac valve repair
- 2) Patients with a previous episode of IE



# Cardiac conditions at highest risk of infective endocarditis

3) Patients with CHD:

- a) Any type of cyanotic CHD
- b) Any type of CHD repaired with prosthetic material, surgically or by percutaneous techniques, up to 6 months after the procedure or lifelong if residual shunt or valvular regurgitation remains
- c) Antibiotic prophylaxis not recommended for any other forms of valvular or CHD

4) Hypertrophic cardiomyopathy

# Recommendation for prophylaxis of IE in high risk

## Recommendations

### A) Dental procedures

. Antibiotic prophylaxis should be considered for dental procedures requiring manipulation of the gingival or periapical region of the teeth or perforation of the oral mucosa

# Recommendations for IE as per procedure

## **B)Respiratory tract procedures:**

Antibiotic prophylaxis not recommended for respiratory tract procedures including bronchoscopy or laryngoscopy trasnasal or endotracheal intubation

# Recommendations for IE prophylaxis

## **C) Gastrointestinal or urogenital procedures or TOE**

Antibiotic prophylaxis is not recommended for gastroscopy, colonoscopy, cystoscopy, vaginal or caesarian delivery or TOE

## **D) Skin and soft tissue procedures**

Antibiotic prophylaxis not recommended for any procedure involving above

(ESC guidelines 2015)

# Recommended prophylaxis for high risk dental procedures

SITUATION	ANTIBIOTIC	SINGLE DOSE
NO ALLERGY TO PENICILIN OR AMPICILLIN	AMOXICILLIN OR AMPICILLIN	CHILDREN 50MG/KG ORALLY OR I.V
ALLERGY TO PENICILLIN OR AMPICILLIN	CLINDAMYCIN	20MG/KG ORALLY OR IV

# Antimicrobial therapy

- Prolonged therapy with bacterial drug is the basis of IE treatment:
- PVE at least 6 weeks
- NVE 2-6 WEEKS
- The indications and pattern of use of aminoglycosides have changed
- No longer recommended in staphylococcal NVE

# Summary

- Antibiotic Prophylaxis required in high risk patient for IE undergoing high risk dental procedures
- Antibiotic Prophylaxis not necessary for most of the other procedures like Gastrointestinal, Renal, Skin and Soft tissue
- Good oral hygiene superior to antibiotic prophylaxis

● THANK YOU FOR  
LISTENING