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Letters to the Editor

Dental considerations in cardiovascular patients: A practical perspective





CrossMark

Recent article, Dental considerations in cardiovascular patients by S. Chaudhary et al. has highlighted the overlap between cardiovascular and dental sciences. Most important are the issues of infective endocarditis prophylaxis and patients on anticoagulants which need further clarification from cardiac perspective. Authors have mentioned that all dental procedures require antibiotic prophylaxis. Recent guidelines recommend prophylaxis only in high risk procedures requiring manipulation of the gingival or periapical region of the teeth or perforation of the oral mucosa and only in patients with highest risk of infective endocarditis which include:

- 1. Patient with any prosthetic valve, including a transcatheter valve, or any prosthetic material was used for cardiac valve repair.
- 2. Patients with previous episode of IE.
- 3. Patients with CHD:
- Any type of cyanotic CHD
- 4. Any type of CHD repaired with a prosthetic material, upto 6 months after the procedure or lifelong if residual shunt or valvular regurgitation remains.

Prophylaxis is not recommended in valvular and other forms of CHD¹. These recommendations are based on studies that low level repeated bacteraemia is associated with daily living activities such as tooth brushing, chewing etc. The risk of IE may be related more to low grade bacteraemia during daily life rather than sporadic high grade bacteraemia after dental procedure, which highlights the importance of dental hygiene. Also prophylaxis may prevent small number of cases but the risk of adverse effects exceeds the benefit of prophylactic antibiotics.

In our country prevalence of rheumatic valvular disease is high, with low socioeconomic status and poor dental hygiene. But we do not have Indian data regarding the disease burden, economic burden of prophylaxis and hazards of antibiotic resistance.

Regarding, patients on anticoagulants who require dental procedure, continuation of therapy without interruption is recommended as bleeding can be easily controlled.

Conflict of interest

There are no conflicts of interest of any of the authors.

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Re chronic stable angina guidelines



IHJ

Dear Dr Mishra,

I read with interest your new guidelines on Chronic stable angina.¹

I feel one or two things should be added the guidelines.

1. The type of chest pain is very important. Just as the ACC guidelines say a chest pain that worsens on emotion or exertion and is relieved at rest is likely to be a cardiac pain. This should be emphasized. The duration of the chest pain is also important. We should emphasize a 1 or 2 s chest pain localized with a finger tip is not a cardiac pain.²



Fig. 1. The coronary angiogram of a patient with chronic stable angina. Her age was 47 years. (Proximal left main stenosis of 80%).



Fig. 2. Another angiographic view of the same patient.

- 2. The second point is any new onset angina should be treated with loading with clopidogrel as it acts within 2 h and reduces cardiovascular mortality. So we should include clopidogrel in the guidelines.⁴ When clopidogrel is given as 75 mg daily it takes 5–7 days to achieve optimum platelet inhibition. Both the Cure trial and the PCI-Cure trials have shown that clopidogrel reduces the total cardiovascular mortality significantly.^{5,6}
- 3. Statins like atorvastatin should be given at the 40 mg dose.⁷ In STEMI patients loading with statin 80 mg atorvastatin and continuing 40 mg statin(atorvastatin) has been shown to reduce the following inflammatory markers-high sensitivity CRP,BNP and MMP 9 high-sensitivity C-reactive protein (hs-CRP), B-type natriuretic peptide (BNP), and matrix metalloproteinase type 9 (MMP-9) (P < 0.05). The ejection fraction of these patients also increased better than in those given low dose statins.
- 4. I feel stenting for simple left main coronary artery disease is better than CABG because there is no time delay (Figs. 1–6). I find left main patients sometimes die even before they can go for surgery. So I feel if they have a low syntax score, in India we should recommend early PCI even as a class 1 indication.

We have had numerous patients who survived after left main stenting and did not have repeat events. I would like to show the electrocardiograms and angiographic pictures of one such patient



Fig. 3. Her electrocardiogram before angiogram.



Fig. 4. Her electrocardiogram 4 h after angiogram showing multiple ST depressions.



Fig. 5. Her angiogram after intervention, she was stented with a 4×23 Science Prime stent, Post dilatation was done and ostial flaring was also done.

(Figs. 1–4). She had chronic stable angina .She became unstable after 4h after the angiogram and the stenting was done at ll pm

and finished at 1 am (Figs. 5 and 6). She survived and still comes for

follow-up. She did not have adequate finances to send for

emergency CABG.



Fig. 6. The stent seen after intervention.

Other wise the guideline is quite adequate. Thanking you,

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Further reading

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