Cardiologist-Dentist Interaction in the Dental Management of Immunocompromised Cardiac Patient

Sir,

There are potential problems that a dental practitioner could likely encounter while treating susceptible cardiac patients like heart transplant recipients, congenital/valvular heart disease, and patients on anticoagulant therapy. Therefore, a proper communication between the cardiologist and the dentist is essential to determine the patient's cardiac status. In the patient's best interest, obtaining a consent letter would be supportive to initiate the dental treatment. Pharmacological considerations (local anaesthetics, antibiotics) should be discussed in order to prevent adverse/allergic events. Transplanted patients are kept under life-long immunosuppressive therapy (Cyclosporine, Mycophenolic acid and Corticosteroids) to stabilise the graft. The given triad remains the popular regimen among cardiologists, wherein high dosages are usually recommended in the initial three months to avoid graft rejection.1 The later drug may provoke adrenal crisis prior to major oral procedures; thereby the dentist needs to seek the consent of cardiologist to alter the medication.

Meanwhile, the immunosuppressants reduce the patient's ability to resist systemic/oral infections and increased risk for complications. Oral reactions like gingival hyperplasia, mouth ulcers, xerostomia, and periodontitis are usual side-effects noticed that demand attention of the dentists. These patients consume more drugs to avert the bacterial, viral, and fungal infections that are common; and a potential risk of drug-drug interaction could occur during local anaesthesia administration. Ephineprine, that is sensitive to catecholamines, could mutually affect the transplanted heart and precipitate cardiac complications. To maintain good practice, administer 0.04 mg of adrenaline for oral manoeuvres.2,3 A couple of factors that should alarm the dentist during oral care include hypertension and bleeding. Hypertension could cross the physiological limits because of anxiety/stress leading to cardiac dysrthmias. Conscious sedation should be opted to allay the fears; and an electrocardiography (ECG) done under the supervision of a cardiologist, would provide safety. The bleeding tendencies are pronounced in patients with anticoagulant therapy. In such patients, the dental procedures can be performed, provided the international normalised ratio (INR) is 2.5 or lower. Checking the level of total blood count would ensure that patient would be able to resist infection, if one occurred following the invasive procedure.

Considering the increased risk for infection/complication, dentists administer antibiotic prophylaxis, thereby encouraging anti-microbial resistance.4,5 Ideally, the cardiologist should decide whether to decrease/increase medications prior to the oral care; and it is worthwhile in valvular and congenital heart disease, considering their susceptibility to ineffective endocarditis. Unless otherwise advised by the physician, American Heart Association (AHA) guidelines are a recommended option, which is readily available for all readers. In adverse conditions for candidates reporting with dental crisis and stated compromised conditions, dentists need to maintain a close contact with cardiologists.

REFERENCES

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**LETTER TO THE EDITOR**

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