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ORIGINAL ARTICLE

Behavior of health professionals concerning the recommendations for prophylaxis for infectious endocarditis in our setting: Are the guidelines followed?☆

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Abstract
Objectives: The prophylaxis regimens for infectious endocarditis recommended by the clinical practice guidelines have recently changed. We do not know whether the current regimens are correctly followed in our setting. Our objective was to describe the approaches of various health professionals concerning these guidelines.
Materials and methods: We conducted a survey in Cordoba, using a 16-item online questionnaire on this topic. We randomly selected a sample of 180 practitioners (20 cardiologists, 80 dentists and 80 primary care physicians), of whom 173 responded.
Results: Half of the participants were men; 52% had more than 20 years of professional experience. Some 88.3% of the participants considered that prophylaxis of endocarditis is effective (77.8% of the cardiologists, 93.7% of the dentist; $p = .086$). In general, prophylaxis is performed in conditions of clearly established risk (>90% of those surveyed). However, prophylaxis is also performed in a high proportion of cases with no risk of endocarditis, varying between 30 and 60% according to the procedure (mostly the dentists, between 36 and 67%, followed by the primary

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care physicians, between 28 and 59%). The antibiotic regimens employed varied significantly. The primary care physicians were furthest from the recommended regimen (only 25.8% used the recommended regimen vs. 54.4% of dentists and 72.2% of cardiologists; $p = .002$).
Conclusions: Compliance with the recommendations on prophylaxis for endocarditis should be improved in our setting. We observed a tendency, especially among noncardiologists, to ''overindicate'' the prophylaxis.

PALABRAS CLAVE
Endocarditis infecciosa;
Profilaxis antibiótica;
Guías de práctica clínica

Conducta de los profesionales sanitarios ante las recomendaciones de profilaxis de endocarditis infecciosa en nuestro medio: ¿se siguen las guías?

Resumen
Objetivos: Las pautas de profilaxis de endocarditis infecciosa recomendadas por las guías de práctica clínica han cambiado recientemente. Se desconoce en nuestro medio si se siguen correctamente las pautas actuales. Nuestro objetivo es describir las actitudes de diferentes profesionales sanitarios ante ellas.
Material y métodos: Hemos realizado una encuesta en Córdoba, mediante un cuestionario online con 16 ítems sobre este tema. Se seleccionó aleatoriamente una muestra de 180 profesionales (20 cardiólogos, 80 dentistas, 80 médicos de atención primaria), de la cual contestaron 173.
Resultados: La mitad eran varones, teniendo más de 20 años de ejercicio profesional el 52%. El 88,3% consideró que la profilaxis de endocarditis es efectiva (cardiólogos, 77,8%, dentistas, 93,7%, p = 0,086). En general, se realiza profilaxis en las situaciones de riesgo claramente establecidas (>90% de los encuestados), pero también en una alta proporción de casos sin riesgo de endocarditis, que oscila entre el 30 y el 60% según los procedimientos (más los dentistas, entre el 36 y 67%, seguidos de los médicos de atención primaria, entre el 28 y 59%). Las pautas antibióticas usadas son muy variadas, siendo los médicos de primaria los que se alejan más de lo recomendado (solo un 25,8% usaban la pauta recomendada, frente a un 54,4% de dentistas y un 72,2% de cardiólogos, p = 0,002).
Conclusiones: El seguimiento de las recomendaciones sobre profilaxis de endocarditis debe mejorarse en nuestro medio, observándose una tendencia, sobre todo en no cardiólogos, a una «sobreindicación» de la misma.

Background

Infectious endocarditis (IE) is a severe disease, with hospital mortality rates of 18–23% and at 6 months after diagnosis of 22–27%, despite advances in its diagnosis and treatment.[1–4] The prevention of IE is therefore essential. Before the publication of the 2007 US[5] and 2009 European[6] clinical practice guidelines (CPGs), IE prophylaxis was classically recommended for patients with heart disease of moderate to high risk (including hemodynamically significant valve lesions) who undergo oral/dental, gastrointestinal, respiratory and genitourinary procedures that could cause bleeding. Due to the lack of evidence on the usefulness of prophylaxis, these GPCs restricted the indications to cases of high-risk IE (prior IE, prosthetic valves, congenital cyanotic heart disease or those repaired with prosthetic material) and only for certain manipulations and oral/dental procedures.[5,6] The British National Institute for Health and Care Excellence 2008 guidelines went a step further and recommended not performing IE prophylaxis under any situation.[7] A recent study published in England reported an increase in the incidence of IE after the publication and following of these British National Institute for Health and Care Excellence recommendations.[8] The latest European CPGs on IE, published in 2015, maintained the recommendations of the 2009 guidelines.[9] It is worth noting that there are also CPGs from Spanish dental societies, published in 2004 and 2006.[10,11]

These changes and the differences among the various CPGs, which are due in large part to the lack of evidence on the usefulness of IE prophylaxis,[12] can lead to doubts about the procedure to follow when faced with patients with a possible risk of developing IE,[13,14] which could result in an increase in the incidence of the disease. The aim of this study was to report the behavior of health professionals when faced with preventing IE and to compare the possible differences among the practitioners involved: cardiologists, dentists and primary care (PC) physicians. Our group has recently published preliminary data on the risk conditions