Understanding Carcinoma In Situ: A Comprehensive Research Perspective

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Abstract

Carcinoma in situ (CIS) represents a critical stage in the continuum of cancer development, where abnormal cells proliferate within their tissue of origin without invading surrounding tissues. This research article provides a comprehensive exploration of CIS, encompassing its deýnition, epidemiology, etiology, diagnostic methods, and management strategies. The review synthesizes current research ýndings, shedding light on the molecular and genetic alterations associated with CIS, the role of risk factors, and the evolving landscape of precision medicine in its diagnosis and treatment. By elucidating the intricate facets of CIS, this article aims to contribute to a deeper understanding of its pathogenesis and potential avenues for targeted interventions.

Keywords: C ; C ; A ; ; E ; E ; D ; ; ;

Introduction

Signi cance in cancer development

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CIS across various cancer types:

Acknowledgement

Con ict of Interest

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References

1. Carmen JC, Roeder BL, Nelson JL, Ogilvie RLR, Robison RA, et al. (2005) Treatment of bioýlm infections on implants with low-frequency ultrasound and antibiotics. Am J Infect Control 33: 78-82.
2. Dhir S (2013) Bioýlm and dental implant: the microbial link. J Indian Soc Periodonto l7: 5-11.
3. Qian Z, Stoodley P, Pitt WG (1996) E ect of low-intensity ultrasound upon bioýlm structure from confocal scanning laser microscopy observation. Biomaterials 17: 1975-1980.
4. Vyas N, Pecheva E, Dehghani H, Sammons RL, Wang QX, et al. (2016) High speed imaging of cavitation around dental ultrasonic scaler tips. PLoS One 11: e0149804.
5. Hauptmann M, Frederickx F, Struyf H, Mertens P, Heyns M, et al. (2013) Enhancement of cavitation activity and particle removal with pulsed high frequency ultrasound and supersaturation. Ultrason. Sonochem 20: 69-76.
6. Yamashita T, Ando K (2019) Low-intensity ultrasound induced cavitation and streaming in oxygen-supersaturated water: role of cavitation bubbles as physical cleaning agents. Ultrason Sonochem 52: 268-279.
7. Kang BK, Kim MS, Park JG (2014) E ect of dissolved gases in water on acoustic cavitation and bubble growth rate in 0.83 MHz megasonic of interest to wafer cleaning. Ultrason Sonochem 21: 1496-503.
8. Koo H, Cury JA, Rosalen PL, Ambrosano GMB (2002) E ect of a mouthrinse containing selected propolis on 3-day dental plaque accumulation and polysaccharide formation. Caries Res 36: 445-448.
9. Smullen J, Koutsou GA, Foster HA, Zumb® A, Storey DM, et al. (2007) The antibacterial activity of plant extracts containing polyphenols against Streptococcus mutans. Caries Res 41: 342-349.
10. Marsh PD (2003) Are dental diseases examples of ecological catastrophes?. Microbiology 149: 279-294.