

MODERN METHODS OF TREATING CARIES

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Abstract

This in the article tooth career in treatment used advanced and effective methods analysis It was made . caries initial in stages detection , tooth tissues maximum at the level save to stay minimally invasive targeted approaches , laser using treatment and remineralization therapy place illuminating Also , modern dental of technologies treatment quality in progress importance seeing released .

Keywords: tooth career, innovation treatment, laser therapy, remineralization, dental technologies, dental enamel, prophylactic dentistry, diagnostics methods, conservative treatment, aesthetic dentistry.

1. Introduction

Current in the period tooth career management possible was diseases to the group is entered . Its to the surface on arrival one row factors participation will and their to all directly impact to do every always possible For example , a tooth tissue enough lack of mineralization , hypoplasia , organism general health of the situation low , low divorce disorder , inconvenient social and economic conditions and genetic tendency such as situations these Nevertheless , caries to develop impact doer main danger factors control to do through of the disease prevent to take possible . In this population and at the individual level organism fluorine with enough supply , mouth space hygiene compliance not to do circumstances eliminate to grow and sugar amount high was products and drinks often consumption to do restriction important importance has . Dental caries spread and to develop impact doer the most important from factors one , especially teeth formation during the period , to the organism optimal amount of fluoride enter It is going to happen . Therefore dental of diseases complex prevention priority direction This process is hygienic and medical measures complex own inside take , caries development prevent to take service does . Modern dental of services high to technologies based on and their expensive because of of the disease prevent to take separately importance profession Caries prevention two main in the direction done increased : mouth in the void caries their hearths eliminate to grow and tooth tissue strength increase . On tooth surfaces harvest to be soft and hard glances regular and good quality mechanic cleaning mouth space diseases prevent in receiving main tool is considered . scientific research to the results according to , fluorides caries in prevention the most effective from tools one is , their wide application last ten in years of caries to decrease noticeable impact showed .

2. Materials and Methods

This the article in preparation tooth career modern treatment approaches analysis to do for theoretical and practical research methods The research was conducted in the process dentistry to the field related scientific articles , clinical recommendations and current medical literature studied and systematic analysis Also

, caries was in treatment wide used technologies — minimum invasive methods , laser treatment , remineralization therapy and traditional filling methods each other compared . Each of the method clinical efficiency , application convenience and patient for security level separately was evaluated . Research during there is scientific information and clinical observation results based on comparative approach done increased . From this except for caries development stages , patients young features and mouth space hygiene taking into account the situation This was taken . methodical approaches modern in dentistry caries treatment the most effective methods determination and them in practice application opportunities to evaluate service did .

3. Results

Dentistry in the field many leader experts to the mind according to the last on annuals during caries in prevention achieved the most important from achievements one fluoride tooth of pastes wide on a scale daily to life current 50 years ago more than time during this from tools regular use caries spread noticeable at the level in reduction important factor to be service Fluorides clinical in terms of proven to caries against effective substance are counted , they mouth space hygiene tools in the composition permanent accordingly is used . Their useful impact from children pull adults and to the elderly was all young in groups approved . Initially fluorides of teeth formation and mineralization to the process positive impact to show with explained if , then their local impact the mechanism is also deep studied . Today on the day fluorides various in forms used : daily hygiene for tooth pastes and mouth rinse solutions , clinical in practice used varnishes and gel preparations , as well as high fluorine content products . These tools tooth to the enamel directly impact and its mineral composition reinforcement and demineralization process to slow down help gives .

Fluoride products from use then ; mouth small amount in the cavity fluorine ions preserved remains and they tooth " reserve " effect on the surface harvest This is what tooth tissue external harmful to factors endurance increases . Increase scientific research local fluoride of drugs caries process in reduction high efficiency confirmed . Top danger to the group incoming in patients additional accordingly fluoride keeper from tools use recommendation Clinical to the information according to , rinse solutions efficiency average 25%, gel preparations 28%, varnishes and up to 33–46% to reach record Modern approaches according to fluorides to caries against impact systematic from using according to local when used much effective manifestation will be . Therefore , experts population dental health in improvement the most convenient , cheap and effective tool as fluoride tooth from the past regular use recommendation Daily use for intended tooth pastes composition in terms of from each other They are different . mainly fluoride source , cleaner and polisher components and nice smell and taste giver additional substances own inside takes . This differences often consumers subjective advantages , that is mouth sensitivity and taste acceptance to do features with is determined . Note that highlight must , tooth in the past fluoride type not , maybe his/her general existence caries in prevention important role plays . However current on the day only to fluoride relying on without delay , early in phase caries changes to return help giving new approaches are also developing . Such methods of enamel remineralization process activation through of the disease start stage to stop focused on . The last in years caries in prevention biological and chemical approaches combined innovative technologies wide are being studied . Of them one arginine , bicarbonate and calcium compounds based system It 's a mouth . in the void microbiological balance to improve service does .This approach probiotic concepts with harmonious and useful microorganisms activity support through tooth your gaze acidity to reduce help gives .

Some arginine shredder bacteria , including *S. sanguis* such as types , arginine ammonia convert in the process mouth pH level of the environment increases . As a result acidity decreasing , tooth enamel decay danger decreases and microbiological biofilm stabilizes . Research this shows that it contains 1.5 % arginine , calcium compounds and 1450 ppm fluoride there is was tooth pastes only fluoride based on to products than to caries against higher protection to the efficiency has to be possible . Arginine and fluoride joint impact tooth tissues further strong protection to do opportunity

On this basis

modern in dentistry arginine , calcium and fluoride own inside received new generation tooth pastes working is being released . Their purpose not only caries prevent to get , maybe early in phase the process return and mouth space health complex accordingly from improvement consists of .

4. Discussion

Tooth career current in the period wide occurring dental from problems one to be , to be treatment and prevent in receiving modern approaches important place Analysis this shows that caries effective control to do only clinical treatment with not limited to , but preventive measures with together take only when you go high result gives . Today in dentistry used minimum invasive technologies , remineralization supporting tools and fluoride and biological active to components based innovative preparations disease process early in stages stopping important importance Especially fluoride and arginine compounds based tooth care tools of enamel strength increase and acid environment negative the secret of the effect in reduction effective is considered . With this together , research caries individual approach to prevention the necessity shows . Each the patient's mouth hygiene condition , age features and general health level treatment and prevention strategy in marking main criterion become service does . Caries modern treatment approaches complex to the character has not only there is the disease to treat , maybe his/her prevent to take and development It is also aimed at limiting . This in dentistry modern technologies and preventive measures wake up application the necessity confirms .

5. Conclusion

Mouth space hygienic of the situation caries in development place today's on the day complete proven and important relevance profession Caries to the surface on arrival one row factors participation will , including mouth hygiene enough attention not to give , to carbohydrates rich products excess consumer goods to do wrong and unbalanced food and population tooth care according to enough knowledge and skills has not being such as cases . Caries in the world the most many occurring dental from diseases one to be , to be prevent to take often simple and effective preventive measures through done increase possible . Therefore prevention measures right organization to grow disease spread noticeable at the level Reduces tooth decay . prevention various approach and methods own inside takes and modern medicine development with their circle expanding This is health storage in the field new scientific research and technological news current to be with directly depends on . In general medicine in general , especially dentistry field permanent in development time is passing to pass with caries treatment and his/her prevent to take further effective and modern methods working This is coming out . prevention and treatment processes continuous improving going shows .

References

1. Baratova Sh. N., Rakhimberdiev R. A., Shamsiev R. A. Features of the course and diagnosis of dental caries in children of primary school age // Achievements of science and education. - 2020. - No. 1 (55). - P. 83-88.
2. Rodionova A.S. "Modern technologies for early diagnosis of caries". Dentist-practitioner, 2014. No. 4. P. 36-37. Baratova Sh. N., Rakhimberdiev R. A., Shamsiev R. A. Prevention of caries of permanent teeth in children of primary school age // Achievements of science and education. - 2020. - No. 4 (58). - P. 67-74.
Botirovna S. Dzh., Kisey Z. M. A., Kisey R. S. B. Periodontitis // Texas Journal of Medical Sciences. - 2021. - Vol. 3. - P. 38-39.

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