

Oral health and brain connection: is there any relationship?

I. Converti^{1,*†}, A. Palermo^{2,†}, A. Mancini³, M.E. Maggiore³, G.M. Tartaglia⁴, E. Ferrara⁵, F. Vecchiet⁵, F. Lorusso⁶, A. Scarano⁶, I.R. Bordea⁷, C. Sforza⁴, C. Maspero⁴, M. Farronato⁴, M.G. Cagetti⁴, A. Patano³, S. Ceci³, A. Corriero⁸, D. Hazballa³, A. Gnoni⁹, A. De Giacomo⁹, A. Semjonova³, K. Ferati¹⁰, A. Bexheti-Ferati¹⁰, M.F. Coscia⁹, R. Del Prete³, E. Xhajanka¹¹, T. Pustina-Krasniqi¹² and G. Malcangi^{3,*}

¹Division of Plastic and Reconstructive Surgery, Mater Dei Hospital, Bari, Italy; ²College of Medicine & Dentistry of Birmingham, Birmingham, United Kingdom; ³Interdisciplinary Department of Medicine, University of Bari "Aldo Moro", Bari, Italy; ⁴UOC Maxillo-Facial Surgery and Dentistry, Department of Biomedical, Surgical and Dental Sciences, School of Dentistry, Fondazione IRCCS Ca Granda, Ospedale Maggiore Policlinico, University of Milan, Milan, Italy; ⁵Complex Operative Unit of Odontostomatology, Hospital S.S. Annunziata, Chieti, Italy; ⁶Department of Oral Science, Nano and Biotechnology and CeSi-Met University of Chieti-Pescara, Chieti, Italy; ⁷Department of Oral Rehabilitation, University of Medicine and Pharmacy "Iuliu Hatieganu", Cluj-Napoca, Romania; ⁸Unit of Anesthesia and Resuscitation, Department of Emergencies and Organ Transplantations, Aldo Moro University, Bari, Italy; ⁹Department of Basic Medical Sciences, Neurosciences and Sense Organs, University of Bari "Aldo Moro", Bari, Italy; ¹⁰Faculty of Medicine, University of Tetovo, Tetovo, Macedonia; ¹¹President of Dental School, Medical University of Tirana, Rruga e Dibrës, Tirana, Albania; ¹²Universiteti I Prishtines "Hasan Prishtina", Prishtine, Kosovo

† These authors contributed equally to this work as first authors.

Several studies reported the association between periodontal diseases, a persistent inflammatory process and other chronic ailments such as cardiovascular diseases, diabetes mellitus, Alzheimer's disease and cancer. Although many epidemiologic data support these associations, a cause-and-effect relationship has not been established. Numerous articles reporting oral bacteria in samples collected directly from brain abscesses confirmed the association between brain abscess and odontogenic infection. Dental diseases can be treated with ambulatory care rather than hospitalization and emergency care. Older adults should establish daily oral hygiene care routines during the early stages of Alzheimer's disease.

Several studies reported the association between periodontal diseases, a persistent inflammatory process and other chronic ailments such as cardiovascular diseases, diabetes mellitus, Alzheimer's disease and

cancer (1-14). Other conditions such as low birth weight and premature delivery due to chorioamnionitis are also known to be linked to poor periodontal health. Although many epidemiologic data support these associations, a

Keywords: cognitive performance; oral health; brain connection; attention; Alzheimer's disease

*Corresponding author:

Dr. Ilaria Converti
Division of Plastic and Reconstructive Surgery, Mater Dei Hospital,
10 v. Samuel F Hahnemann, 70125, Bari, Italy
ilaria.converti@gmail.com

Dr. Giuseppina Malcangi
Interdisciplinary Department of Medicine
University of Bari "Aldo Moro", 70121 Bari, Italy
giuseppinamalcangi@libero.it

cause-and-effect relationship has not been established (15-21). Numerous articles reporting oral bacteria in samples collected directly from brain abscesses confirmed the association between brain abscess and odontogenic infection. Upper molars were the teeth most often associated with brain abscesses (22-29). Spontaneous brain abscesses and intracranial empyema are rare but life-threatening diseases. They can result from potential complications of chronic oral infections. Given the similarity between germs commonly found in cerebral abscesses and the oral cavity and its anatomic proximity, the oral cavity represents a significant source of cerebral infections (30-52).

The oral microbiota has been implicated in various neurologic conditions, including autism spectrum disorder and Alzheimer's disease. Recent data propose the etiopathogenetic role of intestinal microbiota in autism spectrum disorder (52-62). Oral cavity pathogens may reach the brain in various ways: 1) direct contiguity spread (notably upper jaw teeth), 2) systemic hematogenous bacteremia (after an invasive oral procedure or even spontaneous), 3) direct venous drainage (52,63-72). Cerebral abscesses linked to oral infection are usually polymicrobial: streptococci, staphylococci, *Actinomyces* sp, *Actinobacillus* sp, and *Fusobacterium* sp (52). Researchers found that bacteria associated with gum disease can be passed into the bloodstream through everyday routines like brushing teeth. When the brain gets repeated exposure to these germs, responses are triggered that can kill brain cells.

Dementia is one of the leading causes of disability among older adults. It is a progressive neurodegenerative disease that affects older adults' ability to perform daily living activities. Alzheimer's disease is the primary subtype of dementia and causes declining memory, reasoning, and communication skills. They also have behavioural and psychological symptoms, such as depression and aggression. Therefore, it is essential for them to maintain good oral health, as oral health is an essential and integral part of their general health (73). However, dental diseases can be treated with ambulatory care rather than hospitalization and emergency care. Therefore, older adults should establish daily oral hygiene

care routines during the early stages of Alzheimer's disease. (73).

Therefore, continuous observation with daily clinical practice by physicians and surgeons, continuous scientific research and further discoveries, 3-dimensional virtual reality, and new technologies can improve patient outcomes and provide new solutions (74-89). Poor oral hygiene, difficulty in wearing dentures, and the inability to self-care, including carrying out oral hygiene procedures, are the most probable cause of impaired oral health in Alzheimer's disease. Collecting information on oral/dental conditions from Alzheimer's disease patients or their caregivers/relatives is often tricky and scientific literature on the topic is sparse (90-155). The problem of awareness of good oral health for keeping quality of life more acceptable in adult-onset dementia disorders is discussed.

REFERENCES

1. Katz J, Wallet S, Cha S. Periodontal disease and the oral-systemic connection: "is it all the RAGE?". *Quintessence Int.* 2010; 41(3):229-237.
2. Santacroce L, Inchingolo F, Topi S, Del Prete R, Di Cosola M, Charitos IA, Montagnani M. Potential beneficial role of probiotics on the outcome of COVID-19 patients: An evolving perspective. *Diabetes Metab Syndr.* 2021; 15 (1):295-301.
3. Quaglia E, Moscufo L, Corsalini M, et al. Polyamide vs silk sutures in the healing of postextraction sockets: a split mouth study. *Oral Implantology* 2018; 11(2):115-120.
4. Rapone B, Ferrara E, Santacroce L, et al. Gingival Crevicular Blood as a Potential Screening Tool: A Cross Sectional Comparative Study. *Int J Environ Res Public Health.* 2020; 17 (20):7356.
5. Inchingolo F, Martelli FS, Gargiulo Isacco C, et al. Chronic Periodontitis and Immunity, Towards the Implementation of a Personalized Medicine: A Translational Research on Gene Single Nucleotide Polymorphisms (SNPs) Linked to Chronic Oral Dysbiosis in 96 Caucasian Patients. *Biomedicines.* 2020; 8(5):115.
6. Rapone B, Converti I, Santacroce L, et al. Impact of Periodontal Inflammation on Nutrition and

- Inflammation Markers in Hemodialysis Patients. *Antibiotics* (Basel). 2019; 8 (4):209.
7. Grassi FR, Rapone B, Scarano Catanzaro F, Corsalini M, Kalemaj Z. Effectiveness of computer-assisted anesthetic delivery system (STA™) in dental implant surgery: a prospective study. *Oral Implantology* 2017; 10:381-389.
 8. Charitos IA, Ballini A, Bottalico L, Cantore S, Passarelli PC, Inchingolo F, D'Addona A, Santacroce L. Special features of SARS-CoV-2 in daily practice. *World J Clin Cases*. 2020; 8 (18):3920-3933.
 9. Ballini A, Cantore S, Scacco S, et al. A comparative study on different stemness gene expression between dental pulp stem cells vs. dental bud stem cells. *Eur Rev Med Pharmacol Sci*. 2019; 23 (4):1626-1633.
 10. Cantore S, Ballini A, De Vito D, et al. Characterization of human apical papilla-derived stem cells. *J Biol Regul Homeost Agents*. 2017; 31 (4):901-910.
 11. Lorusso F, Postiglione F, Delvecchio M, Rapone B., Scarano A. The impact of diabetes on implant oral rehabilitations: a bibliometric study and literature review. *Acta Medica Mediterranea* 2020; 36: 3333.
 12. Rapone B, Ferrara E, Corsalini M, Qorri E, Converti I, Lorusso F, Delvecchio M, Gnoni A, Scacco S, Scarano A. Inflammatory Status and Glycemic Control Level of Patients with Type 2 Diabetes and Periodontitis: A Randomized Clinical Trial. *Int J Environ Res Public Health* 2021 Mar 15;18(6):3018.
 13. Rapone B, Corsalini M, Converti I, et al. Does Periodontal Inflammation Affect Type 1 Diabetes in Childhood and Adolescence? A Meta-Analysis. *Front. Endocrinol*. 2020; 11:278.
 14. Rapone B, Ferrara E, Corsalini M, et al. The Effect of Gaseous Ozone Therapy in Conjunction with Periodontal Treatment on Glycated Hemoglobin Level in Subjects with Type 2 Diabetes Mellitus: An Unmasked Randomized Controlled Trial. *Int. J. Environ. Res. Public Health* 2020; 17 (15):54675.
 15. Rapone B, Ferrara E, Santacroce L, Topi S, Gnoni A, Dipalma G, Mancini A, Di Domenico M, Tartaglia GM, Scarano A, Inchingolo F. The Gaseous Ozone Therapy as a Promising Antiseptic Adjuvant of Periodontal Treatment: A Randomized Controlled Clinical Trial. *International Journal of Environmental Research and Public Health* 2022; 19(2):985.
 16. Corsalini M, Di Venere D, Carossa M, et al. Comparative clinical study between zirconium-ceramic and metal-ceramic fixed rehabilitations. *Oral Implantology* 2018; 11:150–160.
 17. Grassi FR, Grassi R, Rapone B, Gianfranco A, Balena A, Kalemaj Z. Dimensional changes of buccal bone plate in immediate implants inserted through open flap, open flap and bone grafting, and flapless technique. A CBCT randomized controlled clinical trial. *Clin Oral Implants Res*. 2019; 30:1155-1164.
 18. Inchingolo F, Tatullo M, Pacifici A, et al. Use of dermal-fat grafts in the post-oncological reconstructive surgery of atrophies in the zygomatic region: clinical evaluations in the patients undergone to previous radiation therapy. *Head Face Med*. 2012; 8:33.
 19. Inchingolo F, Tatullo M, Abenavoli FM, et al. Severe anisocoria after oral surgery under general anesthesia. *Int J Med Sci*. 2010; 7 (5):314-8.
 20. Inchingolo F, Tatullo M, Abenavoli FM, et al. Surgical treatment of depressed scar: a simple technique. *Int J Med Sci*. 2011;8(5):377-9.
 21. Corsalini M, Di Venere D, Sportelli P, et al. Evaluation of prosthetic quality and masticatory efficiency in patients with total removable prosthesis: study of 12 cases. *Oral Implantology* 2018; 11:230–240.
 22. Lisboa ECC, Silva WO, Rodrigues RCV, Brum SC, Alves FRF. The connection between brain abscess and odontogenic infections: A systematic review. *Arch Oral Biol*. 2022; 135:105360.
 23. Corsalini M, Di Venere D, Rapone B, Stefanachi G, Laforgia A, Pettini F. Evidence of signs and symptoms of Craniomandibular Disorders in Fibromyalgia patients. *The Open Dent Journal* 2017; 11(1):91–98.
 24. Inchingolo F, Santacroce L, Ballini A, et al. Oral Cancer: A Historical Review. *Int J Environ Res Public Health*. 2020; 17(9):3168.
 25. Di Venere D, Pettini F, Nardi GM, et al. Correlation between parodontal indexes and orthodontic retainers: prospective study in a group of 16 patients. *Oral Implantology* 2017; 10:78-86.
 26. Inchingolo F, Ballini A, Cagiano R, et al. Immediately loaded dental implants bioactivated with platelet-rich plasma (PRP) placed in maxillary and mandibular region. *Clin Ter*. 2015; 166 (3):e146-52.
 27. Di Venere D, Corsalini M, Nardi GM, Laforgia A, Grassi FR, Rapone B, Pettini F. Obstructive

- site localization in patients with Obstructive Sleep Apnea Syndrome: a comparison between otolaryngologic data and cephalometric values. *Oral Implantology* 2017; 10:295–310.
28. Scarano A, Inchingolo F, Murmura G, Traini T, Piattelli A, Lorusso F. Three-Dimensional Architecture and Mechanical Properties of Bovine Bone Mixed with Autologous Platelet Liquid, Blood, or Physiological Water: An In Vitro Study. *Int J Mol Sci.* 2018; 19 (4):1230.
 29. Inchingolo AD, Inchingolo AM, Bordea IR, et al. SARS-CoV-2 Disease Adjuvant Therapies and Supplements Breakthrough for the Infection Prevention. *Microorganisms.* 202; 9 (3):525.
 30. Kichenbrand C, Marchal A, Mouraret A, et al. Brain abscesses and intracranial empyema due to dental pathogens: Case series. *Int J Surg Case Rep.* 2020; 69:35-38.
 31. Rapone B, Ferrara E, Santacroce L, et al. Periodontal Microbiological Status Influences the Occurrence of Cyclosporine-A and Tacrolimus- Induced Gingival Overgrowth. *Antibiotics* 2019; 8:124.
 32. Rapone B, Ferrara E, Montemurro N, et al. Oral Microbiome and Preterm Birth: Correlation or Coincidence? A Narrative Review. *Open Access Maced. J. Med. Sci.* 2020; 8:123–132.
 33. Inchingolo F, Tatullo M, Abenavoli FM, Marrelli M, Inchingolo AD, Inchingolo AM, Dipalma G. Comparison between traditional surgery, CO2 and Nd:Yag laser treatment for generalized gingival hyperplasia in Sturge-Weber syndrome: a retrospective study. *J Investig Clin Dent.* 2010; 1 (2):85-89.
 34. Dang QT, Huynh TD, Inchingolo F, Dipalma G, Inchingolo AD, et al. Human Chondrocytes from Human Adipose Tissue-Derived Mesenchymal Stem Cells Seeded on a Dermal-Derived Collagen Matrix Sheet: Our Preliminary Results for a Ready to Go Biotechnological Cartilage Graft in Clinical Practice. *Stem Cells Int.* 2021; 2021:6664697.
 35. Ballini A, Cantore S, Signorini L, Saini R, Scacco S, Gnoni A, Inchingolo AD, et al. Efficacy of Sea Salt-Based Mouthwash and Xylitol in Improving Oral Hygiene among Adolescent Population: A Pilot Study. *Int J Environ Res Public Health.* 2020; 18 (1):44.
 36. Adina S, Dipalma G, Bordea IR, Lucaciu O, Feurdean C, Inchingolo AD, et al. Orthopedic joint stability influences growth and maxillary development: clinical aspects. *J Biol Regul Homeost Agents.* 2020; 34 (3):747-756.
 37. Lorusso F, Noubbissi S, Inchingolo F, Rapone B, Khater AGA, Scarano A. Scientific Trends in Clinical Research on Zirconia Dental Implants: A Bibliometric Review. *Materials* 2020, 13:5534.
 38. Rapone B, Nardi GM, Di Venere D, Pettini F, Grassi FR, Corsalini M. Oral hygiene in patients with oral cancer undergoing chemotherapy and/or radiotherapy after prosthesis rehabilitation: protocol proposal. *Oral Implantology* 2016; 9 (01 suppl): 90-97.
 39. Di Comite M, Crincoli V, Fatone L, Ballini A, et al. Quantitative analysis of defects at the dentin-post space in endodontically treated teeth. *Materials* 2015; 8,3268-3283.
 40. Rapone B, Palmisano C, Ferrara E, Di Venere D, Albanese G, Corsalini M. The Accuracy of Three Intraoral Scanners in the Oral Environment with and without Saliva: A Comparative Study. *Appl. Sci.* 2020; 10, 7762.
 41. Pham VH, Gargiulo Isacco C, Nguyen KCD, et al. Rapid and sensitive diagnostic procedure for multiple detection of pandemic Coronaviridae family members SARS-CoV-2, SARS-CoV, MERS-CoV and HCoV: a translational research and cooperation between the Phan Chau Trinh University in Vietnam and University of Bari “Aldo Moro” in Italy. *Eur Rev Med Pharmacol Sci.* 2020; 24 (12):7173-7191.
 42. Bordea IR, Xhajanka E, Candrea S, Bran S, Onișor F, Inchingolo AD, et al. Coronavirus (SARS-CoV-2) Pandemic: Future Challenges for Dental Practitioners. *Microorganisms.* 2020; 8 (11):1704.
 43. Scarola R, Montemurro N, Ferrara E, Corsalini M, Converti I, Rapone B. Temporomandibular Disorders and Fibromyalgia: A Narrative Review. *Open Access Maced J Med Sci [Internet].* 2021; 9 (F):106-12.
 44. Montemurro N., Perrini P., Rapone B. Clinical Risk and Overall Survival in Patients with Diabetes Mellitus, Hyperglycemia and Glioblastoma Multiforme. A Review of the Current Literature. *Int. J. Environ. Res. Public Health* 2020, 17, 8501. doi: 10.3390/ijerph17228501.
 45. Rapone B, Pedone S, Carnevale A, Plantamura P, Scarano A, Demelio A, Demelio GP, Corsalini

- M. Profilometer Comparison of the Surface Roughness of Four Denture Base Resins: An In Vitro Study. *Applied Sciences*. 2022; 12(4):1837. <https://doi.org/10.3390/app12041837>.
46. Malcangi G, Inchingolo AD, Inchingolo AM, Piras F, Settanni V, Garofoli G, Palmieri G, Ceci S, Patano A, Mancini A, Vimercati L, Nemore D, Scardapane A, Rapone B, Semjonova A, D’Oria MT, Macchia L, Bordea IR, Migliore G, Scarano A, Lorusso F, Tartaglia GM, Giovanniello D, Nucci L, Maggialetti N, Parisi A, Domenico MD, Brienza N, Tafuri S, Stefanizzi P, Curatoli L, Corriero A, Contaldo M, Inchingolo F, Dipalma G. COVID-19 Infection in Children and Infants: Current Status on Therapies and Vaccines. *Children*. 2022; 9(2):249. <https://doi.org/10.3390/children9020249>.
47. Malcangi G, Inchingolo AD, Patano A, Coloccia G, Ceci S, Garibaldi M, Inchingolo AM, Piras F, Cardarelli F, Settanni V, Rapone B, Corriero A, Mancini A, Corsalini M, Nucci L, Bordea IR, Lorusso F, Scarano A, Giovanniello D, Dipalma G, Posa VM, Di Venere D, Inchingolo F. Impacted Central Incisors in the Upper Jaw in an Adolescent Patient: Orthodontic-Surgical Treatment-A Case Report. *Applied Sciences*. 2022; 12(5):2657. <https://doi.org/10.3390/app12052657>.
48. Montemurro N., Perrini P., Marani W., Chaurasia B., Corsalini M., Scarano A., Rapone B. Multiple Brain Abscesses of Odontogenic Origin. May Oral Microbiota Affect Their Development? A Review of the Current Literature. *Appl. Sci*. 2021, 11, 3316. doi: 10.3390/app11083316.
49. Di Venere D, Rapone B, Corsalini M. Dental trauma in the anterior sector: an analysis of the predisposing factors in a group of orthodontic patients. *Clinica Terapeutica* 2020, 171 (6):e481-485. doi: 10.7417/CT.2020.2261.
50. Nardi G.M., Ferrara E., Converti I., Cesarano F., Scacco S., Grassi R., Gnoni A., Grassi F.R., Rapone B. Does Diabetes Induce the Vascular Endothelial Growth Factor (VEGF) Expression in Periodontal Tissues? A Systematic. *Int. J. Environ. Res. Public Health* 2020, 17(8), 2765. doi: 10.3390/ijerph17082765.
51. Montemurro N. Intracranial hemorrhage and COVID-19, but please do not forget “old diseases” and elective surgery. *Brain Behav Immun*. 2021; 92:207-208.
52. Qiao Y, Gong W, Li B, et al. Oral Microbiota Changes Contribute to Autism Spectrum Disorder in Mice. *J Dent Res*. 2022; 3:220345211070470.
53. Montemurro N. Glioblastoma Multiforme and Genetic Mutations: The Issue Is Not Over Yet. An Overview of the Current Literature. *J Neurol Surg A Cent Eur Neurosurg*. 2020; 81 (1):64-70.
54. Cozzani M, Sadri D, Nucci L, Jamilian P, Pirhadirad AP, Jamilian A. The effect of Alexander, Gianelly, Roth, and MBT bracket systems on anterior retraction: a 3-dimensional finite element study. *Clin Oral Investig*. 2020 Mar;24(3):1351-1357. doi: 10.1007/s00784-019-03016-6.
55. Perrini P, Montemurro N, Caniglia M, Lazzarotti G, Benedetto N. Wrapping of intracranial aneurysms: Single-center series and systematic review of the literature. *Br J Neurosurg*. 2015; 29:785-791.
56. Marra, P.; Nucci, L.; Jamilian, A.; Perillo, L.; Itró, A.; Grassia, V. Odontoma in a Young and Anxious Patient Associated with Unerupted Permanent Mandibular Cuspid: A Case Report. *J. Int. Oral Health* 2020, 12, 182, doi:10.4103/jioh.jioh_287_19.
57. De Felice ME, Nucci L, Fiori A, Flores-Mir C, Perillo L, Grassia V. Accuracy of interproximal enamel reduction during clear aligner treatment. *Prog Orthod*. 2020 Jul 28;21(1):28. doi: 10.1186/s40510-020-00329-1.
58. d’Apuzzo, F.; Minervini, G.; Grassia, V.; Rotolo, R.P.; Perillo, L.; Nucci, L. Mandibular Coronoid Process Hypertrophy: Diagnosis and 20-Year Follow-Up with CBCT, MRI and EMG Evaluations. *Appl.vSci*. 2021, 11, 4504, doi:10.3390/app11104504.
59. Cozzani M, Nucci L, Lupini D, Dolatshahizand H, Fazeli D, Barzkar E, Naeini E, Jamilian A. The ideal insertion angle after immediate loading in Jeil, Storm, and Thunder miniscrews: A 3D-FEM study. *Int Orthod*. 2020 Sep;18(3):503-508. doi: 10.1016/j.ortho.2020.03.003.
60. Di Naro E, Loverro M, Converti I, Loverro MT, Ferrara E, Rapone B. The Effect of Menopause Hypoestrogenism on Osteogenic Differentiation of Periodontal Ligament Cells (PDLC) and Stem Cells (PDLCs): A Systematic Review. *Healthcare (Basel)*. 2021 May 12;9(5):572. doi: 10.3390/

- healthcare9050572.
61. Mavriqi L, Lorusso F, Conte R, Rapone B, Scarano A. Zygomatic implant penetration to the central portion of orbit: a case report. *BMC Ophthalmol.* 2021, 21(1):121. doi: 10.1186/s12886-021-01846-1.
 62. Corsalini M, Rapone B, Cagnetta G, Carossa M, Sportelli P, De Giacomo A, Laforgia A, Di Venere D. Orofacial functions and chewing efficiency in elderly patients with Parkinson's disease rehabilitated with removable prostheses. *The Open Dentistry* 2020, 14:13-18. doi: 10.2174/1874210602014010013.
 63. Fanelli GN, Grassini D, Ortenzi V, et al. Decipher the Glioblastoma Microenvironment: The First Milestone for New Groundbreaking Therapeutic Strategies. *Genes (Basel).* 2021; 12 (3):445.
 64. Montemurro N, Perrini P, Blanco MO, Vannozzi R. Second surgery for recurrent glioblastoma: A concise overview of the current literature. *Clin Neurol Neurosurg.* 2016; 142:60-64.
 65. Scarano A, Rapone B, Amuso D, Inchingolo F, Lorusso F. Hyaluronic Acid Fillers Enriched with Glycine and Proline in Eyebrow Augmentation Procedure. *Aesthetic Plast Surg.* 2022 Feb;46(1):419-428. doi: 10.1007/s00266-021-02412-2.
 66. Montemurro N, Benet A, Lawton MT. Julius Caesar's Epilepsy: Was It Caused by A Brain Arteriovenous Malformation? *World Neurosurg.* 2015; 84 (6):1985-1987.
 67. Das S, Montemurro N, Ashfaq M, Ghosh D, Sarker AC, Khan AH, Dey S, Chaurasia B. Resolution of papilledema following ventriculoperitoneal shunt or endoscopic third ventriculostomy for obstructive hydrocephalus: A pilot Study. *Medicina.* 2022; 58 (2):281.
 68. Benet A, Montemurro N, Lawton MT. Management of a Ruptured Posterior Inferior Cerebellar Artery (PICA) Aneurysm With PICA-PICA In Situ Bypass and Trapping: 3-Dimensional Operative Video. *Oper Neurosurg (Hagerstown).* 2017; 13 (3):400.
 69. Marani W, Mannarà F, Noda K, et al. Management of an Uncommon Complication: Anterior Choroidal Artery Occlusion by Posterior Clinoid Process Detected Through Intraoperative Monitoring After Clipping of Paraclinoid Aneurysm: 2-Dimensional Operative Video. *Oper Neurosurg (Hagerstown).* 2021; 21 (2):E124-E125.
 70. Cozzani M, Sadri D, Nucci L, Jamilian P, Pirhadirad AP, Jamilian A. The effect of Alexander, Gianelly, Roth, and MBT bracket systems on anterior retraction: a 3-dimensional finite element study. *Clin Oral Investig.* 2020 Mar;24(3):1351-1357. doi: 10.1007/s00784-019-03016-6.
 71. Scarano A., Rapone B., Amuso D., Inchingolo F., Lorusso F. Hyaluronic Acid Fillers Enriched with Glycine and Proline in Eyebrow Augmentation Procedure. *Aesthetic Plast Surg* 2022, 46(1):419-428 doi: 10.1007/s00266-021-02412-2.
 72. Scarano A., Inchingolo F., Rapone B., Lucchina A.G., Qorri E., Lorusso F. Role of Autologous Platelet Gel (APG) in Bone Healing: A Rabbit Study. *Appl. Sci.* 2021, 11, 395. doi: 10.3390/app11010395.
 73. Gao SS, Chu CH, Young FYF. Oral Health and Care for Elderly People with Alzheimer's Disease. *Int J Environ Res Public Health.* 2020; 17(16):5713.
 74. Montemurro N, Murrone D, Romanelli B, Ierardi A. Postoperative Textiloma Mimicking Intracranial Rebleeding in a Patient with Spontaneous Hemorrhage: Case Report and Review of the Literature. *Case Rep Neurol.* 2020; 12 (1):7-12.
 75. Dekel E, Nucci L, Weill T, Flores-Mir C, Becker A, Perillo L, Chaushu S. Impaction of maxillary canines and its effect on the position of adjacent teeth and canine development: A cone-beam computed tomography study. *Am J Orthod Dentofacial Orthop.* 2021 Feb;159(2):e135-e147. doi: 10.1016/j.ajodo.2020.10.015.
 76. Owen CM, Montemurro N, Lawton MT. Blister Aneurysms of the Internal Carotid Artery: Microsurgical Results and Management Strategy. *Neurosurgery.* 2017; 80 (2):235-247.
 77. Ahsan MK, Hossain MR, Khan MSI, et al. Lumbar revision microdiscectomy in patients with recurrent lumbar disc herniation: A single-center prospective series. *Surg Neurol Int.* 2020; 11:404.
 78. Canseco JA, Schroeder GD, Paziuk TM, et al. The Subaxial Cervical AO Spine Injury Score. *Global Spine J.* 2020; 11:2192568220974339.
 79. Perrini P, Montemurro N. Congenital absence of a cervical spine pedicle. *Neurol India.* 2016; 64 (1):189-190.
 80. Schroeder GD, Canseco JA, Patel PD, et al. Establishing the Injury Severity of Subaxial Cervical

- Spine Trauma: Validating the Hierarchical Nature of the AO Spine Subaxial Cervical Spine Injury Classification System. *Spine (Phila Pa 1976)*. 2021; 46 (10):649-657.
81. Perrini P, Gambacciani C, Martini C, Montemurro N, Lepori P. Anterior cervical corpectomy for cervical spondylotic myelopathy: Reconstruction with expandable cylindrical cage versus iliac crest autograft. A retrospective study. *Clin Neurol Neurosurg*. 2015; 139:258-263.
 82. Islam MA, Afreen MS, Montemurro N, Chaurasia B. Surgical Approach for Spinal Tumors: Our Experience in Combined Military Hospital Dhaka. *Surgeries*. 2021; 2 (3):303-307.
 83. Canseco JA, Schroeder GD, Patel PD, et al. Regional and experiential differences in surgeon preference for the treatment of cervical facet injuries: a case study survey with the AO Spine Cervical Classification Validation Group. *Eur Spine J*. 2021; 30 (2):517-523.
 84. Montemurro N, Ortenzi V, Naccarato GA, Perrini P. Angioleiomyoma of the knee: An uncommon cause of leg pain. A systematic review of the literature. *Interdiscip. Neurosurg*. 2020; 22:100877.
 85. Montemurro N, Perrini P. Will COVID-19 change neurosurgical clinical practice? *Br J Neurosurg*. 2020; 1:1-2.
 86. Condino S, Montemurro N, Cattari N, D'Amato R, Thomale U, Ferrari V, Cutolo F. Evaluation of a Wearable AR Platform for Guiding Complex Craniotomies in Neurosurgery. *Ann Biomed Eng*. 2021; 49 (9):2590-2605.
 87. Mishra R, Narayanan MDK, Umana GE, Montemurro N, Chaurasia B, Deora H. Virtual Reality in Neurosurgery: Beyond Neurosurgical Planning. *Int J Environ Res Public Health*. 2022; 19 (3):1719.
 88. Montemurro N, Condino S, Cattari N, D'Amato R, Ferrari V, Cutolo F. Augmented Reality-Assisted Craniotomy for Parasagittal and Convexity En Plaque Meningiomas and Custom-Made Cranio-Plasty: A Preliminary Laboratory Report. *Int J Environ Res Public Health*. 2021; 18 (19):9955.
 89. Montemurro N, Scerrati A, Ricciardi L, Trevisi G. The Exoscope in Neurosurgery: An Overview of the Current Literature of Intraoperative Use in Brain and Spine Surgery. *J Clin Med*. 2021; 11 (1):223.
 90. Mancini M, Grappasonni I, Scuri S, Amenta F. Oral health in Alzheimer's disease: a review. *Curr Alzheimer Res*. 2010; 7(4):368-373.
 91. Lizana J, Montemurro N, Aliaga N, Marani W, Tanikawa R. From textbook to patient: a practical guide to train the end-to-side microvascular anastomosis. *Br J Neurosurg*. 2021; 7:1-5
 92. Montemurro N, Anania Y, Cagnazzo F, Perrini P. Survival outcomes in patients with recurrent glioblastoma treated with Laser Interstitial Thermal Therapy (LITT): A systematic review. *Clin Neurol Neurosurg*. 2020; 195:105942.
 93. Ahsan K, Khan SI, Zaman N, Ahmed N, Montemurro N, Chaurasia B. Fusion versus nonfusion treatment for recurrent lumbar disc herniation. *J Craniovertebr Junction Spine*. 2021; 12 (1):44-53.
 94. Di Venere D, Nardi GM, Lacarbonara V, Laforgia A, Stefanachi G, Corsalini M, Grassi FR, Rapone B, Pettini F. Early mandibular canine-lateral incisor transposition: Case Report. *Oral Implantology* 2017 April; 10(2):181-189. doi: 10.11138/orl/2017.10.2.181.
 95. Inchingolo, A.D.; Ceci, S.; Patano, A.; Inchingolo, A.M.; Montenegro, V.; Di Pede, C.; Malcangi, G.; Marinelli, G.; Coloccia, G.; Garibaldi, M.; Kruti, Z.; Palmieri, G.; De Leonardis, N.; Rapone, B.; Mancini, A.; Semjonova, A.; Nucci, L.; Bordea, I.R.; Scarano, A.; Lorusso, F.; Ferrara, E.; Farronato, M.; Tartaglia, G.M.; Di Venere, D.; Cardarelli, F.; Inchingolo, F.; Dipalma, G. Elastodontic Therapy of Hyperdivergent Class II Patients Using AMCOP® Devices: A Retrospective Study. *Appl. Sci*. 2022, 12, 3259. doi: 10.3390/app12073259
 96. Bellocchio, L., Bordea, I.R., Ballini, A., ...Logroscino, G., Miani, A. Environmental issues and neurological manifestations associated with covid-19 pandemic: New aspects of the disease? *International Journal of Environmental Research and Public Health*, 2020, 17(21), pp. 1–11, 8049
 97. Dohan Ehrenfest, D.M., Del Corso, M., Inchingolo, F., Charrier, J.-B. Selecting a relevant in vitro cell model for testing and comparing the effects of a Choukroun's platelet-rich fibrin (PRF) membrane and a platelet-rich plasma (PRP) gel: Tricks and traps. *Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology and Endodontology*, 2010, 110(4), pp. 409–411.

98. Farronato, M.; Farronato, D.; Inchingolo, F.; Grassi, L.; Lanteri, V.; Maspero, C. Evaluation of Dental Surface after De-Bonding Orthodontic Bracket Bonded with a Novel Fluorescent Composite: In Vitro Comparative Study. *Appl. Sci.* 2021, 11, 6354. doi:10.3390/app11146354.
99. Cardarelli, F.; Patano, A.; Montenegro, V.; Malcangi, G.; Coloccia, G.; Inchingolo, A.D.; Marinelli, G.; Laudadio, C.; Dipalma, G.; Di Venere, D.; Inchingolo, F. Elastodontic therapy un nuovo approccio alla terapia ortodontica funzionale. *Il Dentista Moderno* 2021, 48-63
100. Inchingolo, F.; Tatullo, M.; Marrelli, M.; Inchingolo, A.M.; Tarullo, A.; Inchingolo, A.D.; Dipalma, G.; Brunetti, S.P.; Tarullo, A.; Cagiano, R. Combined Occlusal and Pharmacological Therapy in the Treatment of Temporomandibular Disorders. *Eur. Rev. Med. Pharmacol. Sci.* 2011, 15, 1296–1300.
101. Maspero C, Abate A, Inchingolo F, Dolci C, Cagetti MG, Tartaglia GM. Incidental Finding in Pre-Orthodontic Treatment Radiographs of an Aural Foreign Body: A Case Report. *Children (Basel)*. 2022 Mar 15;9(3):421. doi: 10.3390/children9030421.
102. Delvecchio M, Rapone B, Simonetti S, Fecarotta S, De Carlo G, Favoino E, Loverro MT, Romano AMI, Taurino F, Di Naro E, Gnoni A. Dietary cholesterol supplementation and inhibitory factor 1 serum levels in two dizygotic Smith-Lemli-Opitz syndrome twins: a case report. *Ital J Pediatr.* 2020 Oct 28;46(1):161. doi: 10.1186/s13052-020-00924-2.
103. Maspero C, Cappella A, Dolci C, Cagetti MG, Inchingolo F, Sforza C. Is Orthodontic Treatment with Microperforations Worth It? A Scoping Review. *Children (Basel)*. 2022 Feb 6;9(2):208. doi: 10.3390/children9020208.
104. Ceratti C, Maspero C, Consonni D, Caprioglio A, Connelly ST, Inchingolo F, Tartaglia GM. Cone-Beam Computed Tomographic Assessment of the Mandibular Condylar Volume in Different Skeletal Patterns: A Retrospective Study in Adult Patients. *Bioengineering (Basel)*. 2022 Mar 2;9(3):102. doi: 10.3390/bioengineering9030102.
105. Goldoni R, Dolci C, Boccalari E, Inchingolo F, Paghi A, Strambini L, Galimberti D, Tartaglia GM. Salivary biomarkers of neurodegenerative and demyelinating diseases and biosensors for their detection. *Ageing Res Rev.* 2022 Apr;76:101587. doi: 10.1016/j.arr.2022.101587.
106. Cavallo A, Priore P, Gnoni GV, Papa S, Zanotti F, Gnoni A. 3,5-Diiodo-L-thyronine administration to hypothyroid rats rapidly enhances fatty acid oxidation rate and bioenergetic parameters in liver cells. *PLoS One.* 2013;8(1):e52328. doi: 10.1371/journal.pone.0052328.
107. Caputi Jambrenghi A, Paglialonga G, Gnoni A, Zanotti F, Giannico F, Vonghia G, Gnoni GV. Changes in lipid composition and lipogenic enzyme activities in liver of lambs fed omega-6 polyunsaturated fatty acids. *Comp Biochem Physiol B Biochem Mol Biol.* 2007 Jul;147(3):498-503. doi: 10.1016/j.cbpb.2007.03.003.
108. Martino NA, Marzano G, Mangiacotti M, Miedico O, Sardanelli AM, Gnoni A, Lacalandra GM, Chiaravalle AE, Ciani E, Bogliolo L, Minervini F, Pizzi F, Dell'Aquila ME. Exposure to cadmium during in vitro maturation at environmental nanomolar levels impairs oocyte fertilization through oxidative damage: A large animal model study. *Reprod Toxicol.* 2017 Apr;69:132-145. doi: 10.1016/j.reprotox.2017.02.005.
109. Cavallo A, Taurino F, Damiano F, Siculella L, Sardanelli AM, Gnoni A. Acute administration of 3,5-diiodo-L-thyronine to hypothyroid rats stimulates bioenergetic parameters in liver mitochondria. *J Bioenerg Biomembr.* 2016 Oct;48(5):521-529. doi: 10.1007/s10863-016-9686-4.
110. Taurino F, Stanca E, Vonghia L, Siculella L, Sardanelli AM, Papa S, Zanotti F, Gnoni A. Short-term type-1 diabetes differentially modulates 14-3-3 proteins in rat brain and liver. *Eur J Clin Invest.* 2014 Apr;44(4):350-8. doi: 10.1111/eci.12241.
111. Damiano F, Giannotti L, Gnoni GV, Siculella L, Gnoni A. Quercetin inhibition of SREBPs and ChREBP expression results in reduced cholesterol and fatty acid synthesis in C6 glioma cells. *Int J Biochem Cell Biol.* 2019 Dec;117:105618. doi: 10.1016/j.biocel.2019.105618.
112. Gnoni A, Siculella L, Paglialonga G, Damiano F, Giudetti AM. 3,5-diiodo-L-thyronine increases de novo lipogenesis in liver from hypothyroid rats by SREBP-1 and ChREBP-mediated transcriptional mechanisms. *IUBMB Life.* 2019 Jul;71(7):863-872.

- doi: 10.1002/iub.2014.
113. Taurino F, Giannoccaro C, Sardanelli AM, Cavallo A, De Luca E, Santacroce S, Papa S, Zanotti F, Gnoni A. Function and expression study uncovered hepatocyte plasma membrane ecto-ATP synthase as a novel player in liver regeneration. *Biochem J*. 2016 Aug 15;473(16):2519-30. doi: 10.1042/BCJ20160065.
 114. Delvecchio M, Pastore C, Giordano P. Treatment Options for MODY Patients: A Systematic Review of Literature. *Diabetes Ther*. 2020 Aug;11(8):1667-1685. doi: 10.1007/s13300-020-00864-4.
 115. Scaramuzza A, Cherubini V, Tumini S, Bonfanti R, Buono P, Cardella F, d'Annunzio G, Frongia AP, Lombardo F, Monciotti AC, Rabbone I, Schiaffini R, Toni S, Zucchini S, Frontino G, Iafusco D; Diabetes Study Group of the Italian Society for Pediatric Endocrinology and Diabetology. Recommendations for self-monitoring in pediatric diabetes: a consensus statement by the ISPED. *Acta Diabetol*. 2014 Apr;51(2):173-84. doi: 10.1007/s00592-013-0521-7.
 116. Faienza MF, Brunetti G, Delvecchio M, Zito A, De Palma F, Cortese F, Nitti A, Massari E, Gesualdo M, Ricci G, Carbonara S, Giordano P, Cavallo L, Scicchitano P, Ciccone MM. Vascular Function and Myocardial Performance Indices in Children Born Small for Gestational Age. *Circ J*. 2016;80(4):958-63. doi: 10.1253/circj.CJ-15-1038.
 117. Delvecchio M, Ludovico O, Menzaghi C, Di Paola R, Zelante L, Marucci A, Grasso V, Trischitta V, Carella M, Barbetti F, Gallo F, Coccioli MS, Zecchino C, Faienza MF, Cardinale G, Franzese A, Mozzillo E, Iafusco D, Zanfardino A. Low prevalence of HNF1A mutations after molecular screening of multiple MODY genes in 58 Italian families recruited in the pediatric or adult diabetes clinic from a single Italian hospital. *Diabetes Care*. 2014 Dec;37(12):e258-60. doi: 10.2337/dc14-1788.
 118. Delvecchio M, Pastore C, Giordano P. Treatment Options for MODY Patients: A Systematic Review of Literature. *Diabetes Ther*. 2020 Aug;11(8):1667-1685. doi: 10.1007/s13300-020-00864-4.
 119. Palumbo O, Palumbo P, Delvecchio M, Palladino T, Stallone R, Crisetti M, Zelante L, Carella M. Microdeletion of 12q24.31: report of a girl with intellectual disability, stereotypies, seizures and facial dysmorphisms. *Am J Med Genet A*. 2015 Feb;167A(2):438-44. doi: 10.1002/ajmg.a.36872.
 120. Pinelli M, Acquaviva F, Barbetti F, Caredda E, Coccozza S, Delvecchio M, Mozzillo E, Pirozzi D, Prisco F, Rabbone I, Sacchetti L, Tinto N, Toni S, Zucchini S, Iafusco D; Italian Study Group on Diabetes of the Italian Society of Pediatric Endocrinology and Diabetology. Identification of candidate children for maturity-onset diabetes of the young type 2 (MODY2) gene testing: a seven-item clinical flowchart (7-iF). *PLoS One*. 2013 Nov 11;8(11):e79933. doi: 10.1371/journal.pone.0079933.
 121. Pocsfalvi G, Cucurullo M, Schlosser G, Cacace G, Siciliano RA, Mazzeo MF, Scacco S, Cocco T, Gnoni A, Malorni A, Papa S. Shotgun proteomics for the characterization of subunit composition of mitochondrial complex I. *Biochim Biophys Acta*. 2006 Sep-Oct;1757(9-10):1438-50. doi: 10.1016/j.bbabi.2006.05.037.
 122. Gnoni A, Giudetti AM. Dietary long-chain unsaturated fatty acids acutely and differently reduce the activities of lipogenic enzymes and of citrate carrier in rat liver. *J Physiol Biochem*. 2016 Sep;72(3):485-94. doi: 10.1007/s13105-016-0495-3.
 123. Taurino F, Gnoni A. Systematic review of plasma-membrane ecto-ATP synthase: A new player in health and disease. *Exp Mol Pathol*. 2018 Feb;104(1):59-70. doi: 10.1016/j.yexmp.2017.12.006.
 124. Lippolis R, Siciliano RA, Mazzeo MF, Abbrescia A, Gnoni A, Sardanelli AM, Papa S. Comparative secretome analysis of four isogenic *Bacillus clausii* probiotic strains. *Proteome Sci*. 2013 Jul 1;11(1):28. doi: 10.1186/1477-5956-11-28.
 125. Priore P, Gnoni A, Natali F, Testini M, Gnoni GV, Siculella L, Damiano F. Oleic Acid and Hydroxytyrosol Inhibit Cholesterol and Fatty Acid Synthesis in C6 Glioma Cells. *Oxid Med Cell Longev*. 2017;2017:9076052. doi: 10.1155/2017/9076052.
 126. Taurino F, Stanca E, Siculella L, Trentadue R, Papa S, Zanotti F, Gnoni A. Mitochondrial proteome analysis reveals depression of the Ndufs3 subunit and activity of complex I in diabetic rat brain. *J Proteomics*. 2012 Apr 18;75(8):2331-41. doi: 10.1016/j.jprot.2012.02.002.
 127. Gnoni A, Longo S, Gnoni GV, Giudetti AM. Carnitine in Human Muscle Bioenergetics: Can

- Carnitine Supplementation Improve Physical Exercise? *Molecules*. 2020 Jan 1;25(1):182. doi: 10.3390/molecules25010182.
128. Cavallo A, Gnoni A, Conte E, Siculella L, Zanotti F, Papa S, Gnoni GV. 3,5-diiodo-L-thyronine increases FoF1-ATP synthase activity and cardiolipin level in liver mitochondria of hypothyroid rats. *J Bioenerg Biomembr*. 2011 Aug;43(4):349-57. doi: 10.1007/s10863-011-9366-3.
 129. Zanotti F, Gnoni A, Mangiullo R, Papa S. Effect of the ATPase inhibitor protein IF1 on H⁺ translocation in the mitochondrial ATP synthase complex. *Biochem Biophys Res Commun*. 2009 Jun 19;384(1):43-8. doi: 10.1016/j.bbrc.2009.04.046.
 130. Butera A, Gallo S, Pascadopoli M, Taccardi D, Scribante A. Home Oral Care of Periodontal Patients Using Antimicrobial Gel with Postbiotics, Lactoferrin, and Aloe Barbadensis Leaf Juice Powder vs. Conventional Chlorhexidine Gel: A Split-Mouth Randomized Clinical Trial. *Antibiotics (Basel)*. 2022 Jan 17;11(1):118. doi: 10.3390/antibiotics11010118.
 131. Lanteri V, Segu M, Doldi J, Butera A. Pre-bonding prophylaxis and brackets detachment: an experimental comparison of different methods. *Int J Clin Dentistry*. 2014;7(2):191-197.
 132. Butera A, Gallo S, Pascadopoli M, Luraghi G, Scribante A. Ozonized Water Administration in Peri-Implant Mucositis Sites: A Randomized Clinical Trial. *Applied Sciences*. 2021; 11(17):7812. <https://doi.org/10.3390/app11177812>.
 133. Calabriso N, Stanca E, Rochira A, Damiano F, Giannotti L, Di Chiara Stanca B, Massaro M, Scoditti E, Demitri C, Nitti P, Palermo A, Siculella L, Carluccio MA. Angiogenic Properties of Concentrated Growth Factors (CGFs): The Role of Soluble Factors and Cellular Components. *Pharmaceutics*. 2021 Apr 29;13(5):635. doi: 10.3390/pharmaceutics13050635.
 134. Palermo, A.; Ferrante, F.; Stanca, E.; Damiano, F.; Gnoni, A.; Batani, T.; Carluccio, M.A.; Demitri, C.; Siculella, L. Release of VEGF from Dental Implant Surface (IML® Implant) Coated with Concentrated Growth Factors (CGF) and the Liquid Phase of CGF (LPCGF): In Vitro Results and Future Expectations. *Appl. Sci*. 2019, 9, 2114. <https://doi.org/10.3390/app9102114>
 135. Inchingolo F, Paracchini L, DE Angelis F, Cielo A, Orefici A, Spitaleri D, Santacroce L, Gheno E, Palermo A. Biomechanical behaviour of a jawbone loaded with a prosthetic system supported by monophasic and biphasic implants. *Oral Implantol (Rome)*. 2017 Feb 14;9(Suppl 1/2016 to N 4/2016):65-70. doi: 10.11138/orl/2016.9.1S.065.
 136. Stanca E, Calabriso N, Giannotti L, Nitti P, Damiano F, Stanca BDC, Carluccio MA, De Benedetto GE, Demitri C, Palermo A, Ferrante F, Siculella L, Rochira A. Analysis of CGF Biomolecules, Structure and Cell Population: Characterization of the Stemness Features of CGF Cells and Osteogenic Potential. *Int J Mol Sci*. 2021 Aug 18;22(16):8867. doi: 10.3390/ijms22168867.
 137. Topi S, Santacroce L, Bottalico L, Ballini A, Inchingolo AD, Dipalma G, Charitos IA, Inchingolo F. Gastric Cancer in History: A Perspective Interdisciplinary Study. *Cancers (Basel)*. 2020 Jan 22;12(2):264. doi: 10.3390/cancers12020264.
 138. Boccellino M, Di Stasio D, Dipalma G, Cantore S, Ambrosio P, Coppola M, Quagliuolo L, Scarano A, Malcangi G, Borsani E, Rinaldi B, Nuzzolese M, Xhajanka E, Ballini A, Inchingolo F, Di Domenico M. Steroids and growth factors in oral squamous cell carcinoma: useful source of dental-derived stem cells to develop a steroidogenic model in new clinical strategies. *Eur Rev Med Pharmacol Sci*. 2019 Oct;23(20):8730-8740. doi: 10.26355/eurrev_201910_19267.
 139. Vermesan D, Inchingolo F, Patrascu JM, Trocan I, Prejbeanu R, Florescu S, Damian G, Benagiano V, Abbinante A, Caprio M, Cagianò R, Haragus H. Anterior cruciate ligament reconstruction and determination of tunnel size and graft obliquity. *Eur Rev Med Pharmacol Sci*. 2015;19(3):357-64.
 140. Inchingolo F, Tatullo M, Abenavoli FM, Marrelli M, Inchingolo AD, Corelli R, Inchingolo AM, Dipalma G. Upper eyelid reconstruction: a short report of an eyelid defect following a thermal burn. *Head Face Med*. 2009 Nov 25;5:26. doi: 10.1186/1746-160X-5-26.
 141. Inchingolo F, Pacifici A, Gargari M, Acitores Garcia JI, Amantea M, Marrelli M, Dipalma G, Inchingolo AM, Rinaldi R, Inchingolo AD, Pacifici L, Tatullo M. CHARGE syndrome: an overview on dental and maxillofacial features. *Eur Rev Med Pharmacol Sci*. 2014;18(15):2089-93.

142. Inchingolo F, Tatullo M, Abenavoli FM, Inchingolo AD, Inchingolo AM, Dipalma G. Fish-hook injuries: a risk for fishermen. *Head Face Med.* 2010 Dec 14;6:28. doi: 10.1186/1746-160X-6-28.
143. Borsani E, Bonazza V, Buffoli B, Nocini PF, Albanese M, Zotti F, Inchingolo F, Rezzani R, Rodella LF. Beneficial Effects of Concentrated Growth Factors and Resveratrol on Human Osteoblasts In Vitro Treated with Bisphosphonates. *Biomed Res Int.* 2018 May 16;2018:4597321. doi: 10.1155/2018/4597321.
144. Fanali S, Tumedei M, Pignatelli P, Inchingolo F, Pennacchietti P, Pace G, Piattelli A. Implant primary stability with an osteocondensation drilling protocol in different density polyurethane blocks. *Comput Methods Biomech Biomed Engin.* 2021 Jan;24(1):14-20. doi: 10.1080/10255842.2020.1806251.
145. Inchingolo F, Tatullo M, Marrelli M, Inchingolo AD, Corelli R, Inchingolo AM, Dipalma G, Abenavoli FM. Clinical case-study describing the use of skin-perichondrium-cartilage graft from the auricular concha to cover large defects of the nose. *Head Face Med.* 2012 Mar 19;8:10. doi: 10.1186/1746-160X-8-10.
146. Inchingolo F, Tatullo M, Abenavoli FM, Marrelli M, Inchingolo AD, Servili A, Inchingolo AM, Dipalma G. A hypothetical correlation between hyaluronic acid gel and development of cutaneous metaplastic synovial cyst. *Head Face Med.* 2010 Jul 15;6:13. doi: 10.1186/1746-160X-6-13.
147. Cantore, S., Ballini, A., De Vito, D., et al. Clinical results of improvement in periodontal condition by administration of oral Probiotics. *Journal of Biological Regulators and Homeostatic Agents*, 2018, 32(5), pp. 1329–1334.
148. Scarano, A.; Inchingolo, F.; Rapone, B.; Festa, F.; Tari, S.R.; Lorusso, F. Protective Face Masks: Effect on the Oxygenation and Heart Rate Status of Oral Surgeons during Surgery. *Int. J. Environ. Res. Public Health* 2021, 18, 2363.
149. Corsalini M, Rapone B, Grassi FR, Di Venere D. A study on oral rehabilitation in stroke patients: analysis of a group of 33 patients. *Gerodontology.* 2010 Sep;27(3):178-82. doi: 10.1111/j.1741-2358.2009.00322.x.
150. Kalemaj Z, Scarano A, Valbonetti L, Rapone B, Grassi FR. Bone Response to Four Dental Implants with Different Surface Topographies: A Histologic and Histometric Study in Minipigs. *Int J Periodontics Restorative Dent.* 2016 Sep-Oct;36(5):745-54. doi: 10.11607/prd.2719.
151. Rapone B, Inchingolo AD, Trasarti S, Ferrara E, Qorri E, Mancini A, Montemurro N, Scarano A, Inchingolo AM, Dipalma G, Inchingolo F. Long-Term Outcomes of Implants Placed in Maxillary Sinus Floor Augmentation with Porous Fluorohydroxyapatite (Algipore® FRIOS®) in Comparison with Anorganic Bovine Bone (Bio-Oss®) and Platelet Rich Plasma (PRP): A Retrospective Study. *Journal of Clinical Medicine.* 2022; 11(9):2491.
152. Inchingolo AD, Patano A, Coloccia G, Ceci S, Inchingolo AM, Marinelli G, Malcangi G, Di Pede C, Garibaldi M, Ciocia AM, Mancini A, Palmieri G, Rapone B, Piras F, Cardarelli F, Nucci L, Bordea IR, Scarano A, Lorusso F, Giovanniello D, Costa S, Tartaglia GM, Di Venere D, Dipalma G, Inchingolo F. Treatment of Class III Malocclusion and Anterior Crossbite with Aligners: A Case Report. *Medicina.* 2022; 58(5):603.
153. Inchingolo AD, Malcangi G, Inchingolo AM, Piras F, Settanni V, Garofoli G, Palmieri G, Ceci S, Patano A, De Leonardis N, Di Pede C, Montenegro V, Azzollini D, Garibaldi MG, Kruti Z, Tarullo A, Coloccia G, Mancini A, Rapone B et al. Benefits and Implications of Resveratrol Supplementation on Microbiota Modulations: A Systematic Review of the Literature. *International Journal of Molecular Sciences.* 2022; 23(7):4027.
154. Kalemaj Z, Scarano A, Valbonetti L, Rapone B, Grassi FR. Bone response to four dental implants with different surface topography: a histologic and histometric study in minipigs. *Int J Periodontics Restorative Dent.* 2016; 36(5):745-54.
155. Lorusso, F.; Postiglione, F.; Delvecchio, M.; Rapone, B.; Scarano, A. The impact of diabetes in implant oral rehabilitations: A bibliometric study and literature review. *Acta Med. Mediterr.* 2020, 36, 3333.