



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

Fig. 3. What do women believe they need by the dentist right now?

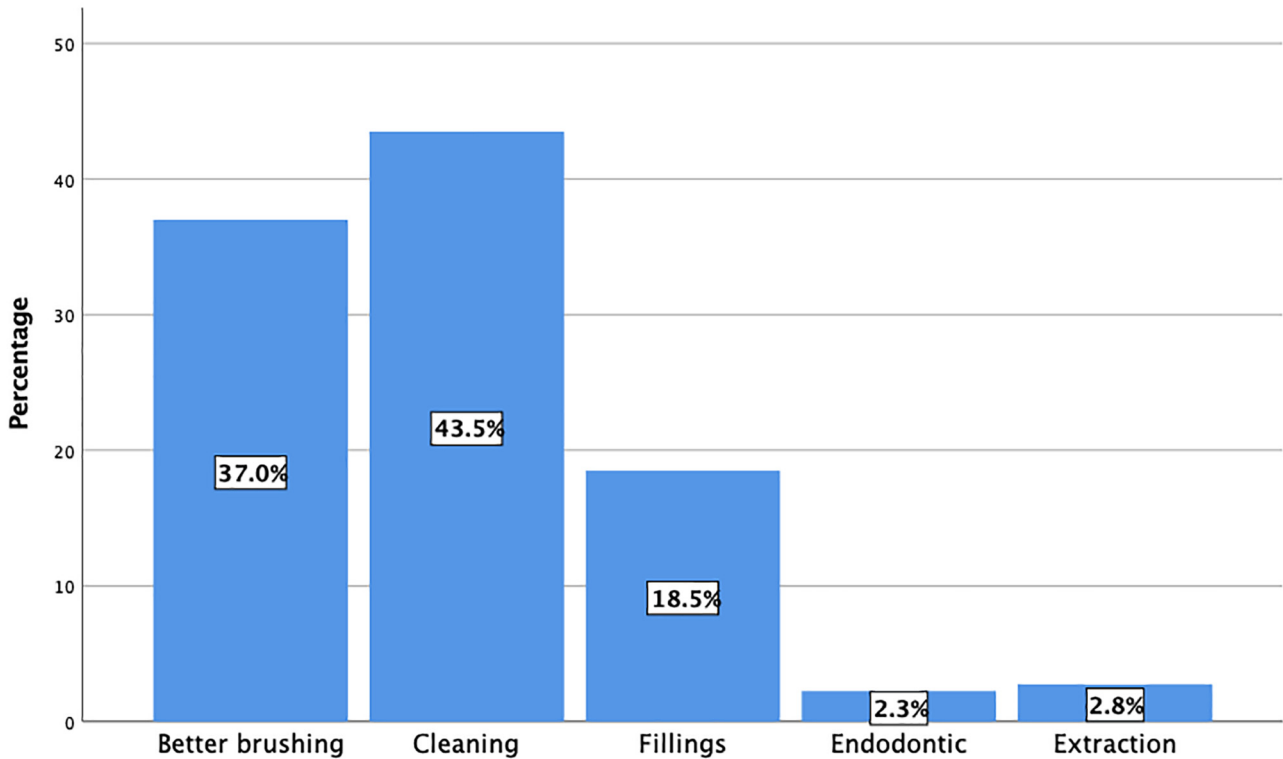


Fig. 4. Smoking habits.

Table 1. Education and oral care habits.

RPL are already studied and 100 women (control group) are currently under genotyping. Genetic material was extracted from

<http://dx.doi.org/10.1016/j.ejogrb.2021.11.341>

401 Association of IL1B -511T>C And IL6 -634G>C Gene polymorphisms with recurrent pregnancy loss risk in greek population

S. Stavros, L. Ntetsika, M. Papamentzelopoulou, D. Mavrogianni, P. Drakakis

Molecular Biology of Reproduction Unit and Recurrent Abortions Unit, Assisted Reproduction Unit, 1st Department of Obstetrics and Gynecology, School of Medicine, Alexandra General Hospital of Athens, National and Kapodistrian University of Athens, Athens, Greece

Introduction and aims of the study: Recurrent pregnancy loss (RPL) affects 2-5% of couples with unexplained etiology. Interleukins are important mediators in the implantation. IL1B is crucial for the regulation of immune responsiveness which is necessary for a successful pregnancy. IL6 is involved in the mechanism of embryonic implantation and placental development. Interleukin gene polymorphisms have been previously associated with risk of pregnancy loss in various populations affecting the maintenance of pregnancy. *IL1B -511T>C* and *IL6 -634G>C* gene polymorphisms seem to be of great interest as biomarkers in RPL. We aim to investigate if *IL1B -511T>C* and *IL6 -634G>C* gene polymorphisms are associated with RPL risk in Greek population. **Methods:** Women with at least two consecutive spontaneous abortions were included. 75 women with

peripheral blood of women with RPL and controls, respectively. *IL1B -511T>C* and *IL6 -634G>C* polymorphisms were genotyped in all RPL women performing Restriction Fragment Length Polymorphism analysis. Control group is under genotyping. Statistical analysis for RPL group was performed via chi-squared test. **Results:** For the *IL6 -634G>C* polymorphism, statistically significant differences were observed between both wild-type (GG) and homozygous mutant (CC) genotype frequencies (77.05% vs 9.84%, $P=0.0009$) and wild-type (GG) and heterozygous mutant (GC) genotype frequencies (77.05% vs 13.11%, $P=0.0004$). No statistically significant differences emerged between wild-type (TT), homozygous mutant (CC) and heterozygous mutant (TC) genotype frequencies (26.67% vs 44% vs 29.33%, respectively) for the *IL1B -511T>C* polymorphism. **Conclusions:** These preliminary findings could suggest that *IL1B -634G>C* variant may be involved in the pathophysiology of PRL, while *IL1B -511T>C* variant may not be associated with recurrent pregnancy loss risk in Greeks. A larger number of polymorphisms in cytokines could be studied to establish a genetic panel associated with RPL.

<http://dx.doi.org/10.1016/j.ejogrb.2021.11.342>

404 Remote monitoring of pregnancies complicated by gestational diabetes mellitus during the covid-19 pandemic using stork. A pilot study

C. Chatzakis¹, D. Floros², N. Pitsianis², K. Dinas¹, A. Sotiriadis¹

¹2nd Department of Obstetrics and Gynecology, Aristotle University of Thessaloniki, Thessaloniki, Greece

²Department of Electrical Engineering, Aristotle University of

Thessaloniki, Thessaloniki, Greece

Introduction and aims: During the COVID-19 pandemic in Greece we used our application STORK, to monitor pregnancies complicated by Gestational Diabetes Mellitus (GDM). STORK was originally developed to predict complications in pregnancy using medical records and daily life measurements. Aim of the present study was to assess the compliance of women with the application and its efficacy in reducing the number of visits. **Methods:** STORK was provided in all women with GDM visiting our outpatient department between February and July 2020. All women were asked to use the application daily imputing their blood glucose measurements, blood pressure measurements, results of blood tests and reports of fetal ultrasounds. The attending physicians had direct access to those data. The number of visits for each pregnant woman was noted. In addition, the number of visits of women with GDM, at the same period in 2019 was reviewed. **Results:** 35 women with GDM enrolled in the study, utilizing the application until the delivery. The average daily number of glucose measurement imputed in the application was 3.2 (0.4) and the average number of visits was 2.8 (0.6). For the same period in 2019, 33 women with GDM visited our outpatient department. The average number of visits was 4.1 (1.1) ($p < 0.05$). **Conclusions:** Stork reduced significantly the number of visits of women with GDM and high compliance was reported.

<http://dx.doi.org/10.1016/j.ejogrb.2021.11.343>

405 The lockdown effect on gynaecological cancer surgeries during the COVID-19 Pandemic

V. Theodoulidis, D. Vlachos, C. Theofanakis, V. Pergialiotis, N. Thomakos, A. Rodolakis, D. Haidopoulos

1st Department of Obstetrics and Gynecology, Alexandra General Hospital of Athens, National and Kapodistrian University of Athens, Athens, Greece

Introduction: The impact of COVID-19 pandemic caused a disruption of the healthcare systems and led to significant delays in diagnosis and treatment of gynecological cancer patients. New algorithms that aim to sustain balance between management of oncological patients and the need to maintain a sufficient amount of resources were adapted. **Methods:** This retrospective study reviewed the patients with gynecological cancer operated in our hospital during the first lockdown period in Greece (between 13 March 2020 and 30 May 2020) and compared the results with the corresponding time period in 2019 before COVID-19 pandemic. We also examine the number of patients that were referred for neoadjuvant chemotherapy or radiotherapy between those periods. **Results:** The gynecological oncological operations performed during the lockdown period of the first pandemic wave were not altered by the outbreak (153 in 2019 vs 130 in 2020) (Figure 1). There was no difference in ovarian cancer surgeries (34 vs 31) and the number of primary debulking was not affected (20 vs 19). The patients referred to neoadjuvant chemotherapy was the same between the two periods. No significant difference was obtained in the endometrial, vaginal and cervical cancer surgeries and the number of surgically treated recurrences. Contrastingly there was a significant decrease in endoscopic procedures and diagnostic biopsies (72 vs 53) and the fertility sparing surgeries were postponed from patients at a later date (Table 1). **Conclusions:** The findings of our study suggest that at the first wave of the pandemic lockdown, the operations conducted in our department did not alter. In accordance with international consensus guidelines the stage, the grade and the type of

cancer, and the potential comorbidities were the main factors that accounted for the decision of the optimal mode of treatment.

<http://dx.doi.org/10.1016/j.ejogrb.2021.11.344>

406 Detection of zeb1 gene in women undergoing ivf treatment

D. Mavrogianni, I. Chrisanthopoulos, S. Stavros, A. Rodolakis, P. Drakakis

1st Department of Obstetrics and Gynecology, School of Medicine, National and Kapodistrian University of Athens, Athens, Greece

Introduction and aims of the study: Infertility is a common problem worldwide and defined as the failure to achieve a clinical pregnancy after 12 months of regular, unprotected intercourse. ZEB1 protein is a zinc-finger E homeobox-binding transcription factor. ZEB1 is involved in epithelial to mesenchymal transition (EMT) acting as a repressor of E-cadherin and other epithelial markers through signaling pathways as TGF- β and Wnt/ β -catenin. Overexpression of ZEB1 expression has been mainly correlated with endometriosis. The aim of the study is the detection of ZEB1 expression in granulosa cells. **Methods:** RNA was extracted from granulosa cells of 56 infertile women undergoing IVF treatment. Reverse transcription-quantitative polymerase chain reaction (RT-qPCR) with SYBR Green was applied in all samples. A correlation of ZEB1 with body mass index (BMI), age, number of oocytes and oocyte maturation was studied, using T-test. **Results:** ZEB1 gene expression was detected in all the samples. (group A<75%, group B>75%). We demonstrated, that ZEB1 is expressed at significantly higher levels in obese women (12%) compared to women with normal weight (68%) ($p = 0,0364$). Additionally higher expression levels tend to be statistically significant ($p = 0,0558$) in obese women compared to overweighted (20%). ZEB1 expression in women with normal weight compared to overweighted is not statistically significant ($p = 0,387$). Moreover, in women above 40 years old (29%), ZEB1 is expressed at significantly lower levels compared to women between 35–40 years old (30%) ($p = 0,0143$) and tend to be statistically significant ($p = 0,0972$) compared to women between 20–35 years old (41%). The correlation between ZEB1 expression, oocyte number and oocyte maturation is not statistically significant ($p = 0,346$) and ($p = 0,263$ respectively). **Conclusions:** ZEB1 may be a possible biomarker implicated in the genetic profile of infertile women undergoing IVF treatment. Mechanisms that involve ZEB1 with infertility should be further investigated.

<http://dx.doi.org/10.1016/j.ejogrb.2021.11.345>

407 Experiences of participation in supervised group exercise among pregnant women with depression or low psychological well-being: A qualitative descriptive study

L. Broberg¹, M. Gaarskjær De Wolff¹, L. Anker¹, P. Damm¹, A. Tabor², H. Hegaard¹, J. Midtgaard³

¹Department of Obstetrics, Copenhagen University Hospital - Rigshospitalet, Copenhagen, Denmark

²Department of Obstetrics, Center of Fetal Medicine, Copenhagen University Hospital - Rigshospitalet, Copenhagen, Denmark

³Department of Public Health, University of Copenhagen, Copenhagen, Denmark

Aim: To explore experiences with supervised group exercise during pregnancy in women with depression or low psychological well-being. **Methods:** A qualitative descriptive study based on semi-