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### A RETROSPECTIVE COHORT STUDY OF THE TRENDS OF SEXUALLY TRANSMITTED INFECTIONS FROM 2008–2017

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**Background** To investigate the long-term trends of five kinds of sexually transmitted infections (STIs) from 2008 to 2017 in the Department of Dermatology and Venereology in a large comprehensive teaching hospital in China.

**Methods** We conducted a retrospective analysis of all recorded data which focused on five STIs: syphilis, gonorrhoea, chlamydia, genital herpes and HIV/AIDS. We also performed stratified analyses of the age and gender of patients with STIs.

**Results** There were 34,644 STI cases diagnosed: syphilis accounted for 53.43% (18,512), gonorrhoea 20.86% (7,228), chlamydia 17.53% (6,072), genital herpes 7.96% (2,757), HIV/AIDS 0.22% (75), respectively. Cases of syphilis significantly increased, while cases of gonorrhoea, chlamydia and genital herpes showed a rapid decrease. HIV/AIDS-diagnosed cases had been rare, but were rising in recent years. The top age group for STI prevalence was 20–39 years with a rate of 70.36%. Men were more affected by STIs than women (male:female ratio 1.40:1), but a lower proportion of men than women had syphilis (0.87:1).

**Conclusion** The considerable changes in the prevalence of the five STIs reported in this study highlight the need for improvement in the prevention of STIs and stronger screening efforts to curb STI transmission in young, sexually active people in a timely manner.

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### TRANSCUTANEOUS ELECTRICAL ACUPOINT STIMULATION (TEAS) IMPROVES IVF OUTCOME IN PATIENTS RECEIVING VITRIFIED-WARMED EMBRYO-TRANSFER

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**Background** To investigate the effects of TEAS on the clinical outcome of IVF patients receiving vitrified-warmed embryo transfer.

**Methods** 120 patients were randomly allocated into the TEAS treatment group and untreated control group. Endometrial thickness, morphology, blood flow, endometrial receptivity related gene expression and clinical pregnancy rates were compared between the two groups.

**Results** In the TEAS group, endometrial blood resistance significantly decreased after TEAS was administered, with the blood resistance index and systolic peak value and the end-diastolic velocity of blood flow being significantly lower ( $p < 0.05$ ) than that of the control group. Endometrial thickness and percentages of type A and type AB endometrium were higher in the TEAS group ( $p > 0.05$ ). Expression levels of endometrial receptivity related genes, such as ITG beta 3, IL1, IL5, IL8, CCL3, CCL4, CCL8, HOXA10, were higher in the TEAS treatment group than in the control group. TEAS

treatment resulted in an increased clinical pregnancy rate, although this was not statistically significant (55.56% vs 40%) ( $p > 0.05$ ).

**Conclusion** TEAS treatment significantly decreases blood flow resistance in the endometrium and increases expression levels of endometrial receptivity related genes. TEAS tends to increase endometrium thickness and improve endometrial morphology, which resulted in an increased clinical pregnancy rate.

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### SOCS1 BOX EVOKED EXPRESSION IN MECHANICALLY STRAINED CULTURED MICE VENTRICLE MYOCARDIUM

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**Background** This study investigated SOCS1 box expression in mechanically strained ventricular myocardium in culture transfection preparations.

**Methods** The left ventricle anterior wall strip in mice was mechanically loaded by length stretching during tissue culture. While constructing the SOCS1 vector, intransfection preparations were also carried out. The preparations of mechanically strained cultures continued for 72 hours. After total proteins were extracted, SDS-PAGE assay was used for evaluating 25 kDa band optical density in the cultured preparations. SOCS1box specific expression optical density was calculated in western blot transfer membrane.

**Results** The total proteins in 25 kDa band were highly expressed in transfection preparations; however, mechanical strain induced increased 25 kDa expression but not significantly. SOCS1 box protein was significantly increased in strained but not in transfection preparations. Furthermore, SOCS1 box expression occurred in the precipitate rather than in the supernatant of strain cultured preparations.

**Conclusion** SOCS1 box protein is mechanically strained cellular signaling which is expressed in mechanically strained cultured mice ventricular myocardium. Transfection alone does not make a significant expression in this model, but combination with mechanical straining can dramatically increase nuclear SOCS1 box protein in cultured ventricular myocardium.

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### POSTPARTUM LUPUS ENCEPHALOPATHY IN A PATIENT WITH SYSTEMIC LUPUS ERYTHEMATOSUS COMPLICATED WITH ANTIPHOSPHOLIPID ANTIBODY SYNDROME

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