Fetal Diagnosis and Therapy

Fetal Cardiac Function

Guest Editors
Fatima Crispi, Barcelona
Eduard Gratacós, Barcelona
There is compelling evidence that many of the risks leading to the most frequent chronic diseases in adulthood originate in the earliest stages of life. Adverse environmental conditions in utero and during infancy can lead to negative health effects during the subsequent lifetime of the exposed individual. This book offers precious insights into the latest concepts and results from epidemiologic, clinical and basic studies in this burgeoning area of health care. The developmental origins of various diseases such as diabetes, obesity and cancer are examined, as well as the early programming of reproductive health and different organs. Attention is given to the impact of environmental factors such as nutrition and pollution, and the mediating genetic and epigenetic pathways are reviewed. A crucial point under discussion is the concept of environmental insults adversely affecting not only the exposed persons, but also their descendants. In addition, the economic consequences of a suboptimal start to life and the importance of preventive measures are stressed. This publication is of great value to anyone interested in health care, notably to specialists in obstetrics, pediatrics, internal medicine, obesity, diabetes and heart disease.

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Guidelines for Authors

Scope and Vision
The scope of "Fetal Diagnosis and Therapy" is fetal medicine in its broadest sense, including basic science and pathophysiological issues, prenatal diagnosis, clinical management and fetal therapy. The journal's main goal is to provide useful information and new insights into fetal diagnosis and therapy in the form of original research, reviews and relevant clinical cases and images. Our vision is to become a journal of reference for the multidisciplinary audience of professionals involved in clinical practice and research in fetal medicine. Authors should ensure that their work complies with all regulations laid down by their state or community and should have obtained the necessary informed consent. Neither the editors nor the publishers will accept any responsibility in the case of neglect or avoidance of these rules.

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- Basic Science and Pathophysiology
- Prenatal Diagnosis
- Clinical Fetal Medicine
- Fetal Therapy

Reviews and Mini-Reviews
Reviews on specific questions or topics which are felt to be of interest to the majority of readers; normally, but not exclusively, on clinical issues. They should be concise reviews or mini-reviews which give evidence and provide an answer to a well-defined aspect or question in a particular area. These reviews are normally invited but suggestions for reviews will also be considered, particularly systematic reviews accompanying a case report or case series if they are deemed to be timely and of high quality. Accepted reviews are not subject to page charges.

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While the main aim of the journal is to publish original research and reviews, case reports which provide relevant insights into the background knowledge or which illustrate an extremely unusual clinical course are welcome. In general, case reports with a review of the literature are discouraged and this option should be reserved for exceptional cases, when the review is deemed to be of very high quality and value to the reader.

Images in Fetal Medicine
The section aims to publish images of high interest, either because they illustrate or aid understanding of an important concept or because the image is of particular quality. Images of all kinds are foreseen, including ultrasound, MRI and fetoscopy. Combinations of prenatal imaging with fetoscopic, postnatal, surgical or pathological imaging are particularly encouraged. Authors may be invited to transfer some clinical cases to this section if the images are particularly good. Papers published in this section will be considered as case reports for Medline purposes.

Letters to the Editor
Letters are encouraged if they directly concern articles previously published in this journal or clinical subjects related to the matters discussed. The editor reserves the right to submit copies of such letters to the authors of the articles concerned prior to publication in order to permit them to respond in the same issue of the journal. Letters on general scientific or medical subjects in fetal medicine are also welcome.

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Whether intentional or not, plagiarism is a serious violation. We define plagiarism as a case in which a paper reproduces another work with at least 25% similarity and without citation. If evidence of plagiarism is found before/after acceptance or after publication of the paper, the author will be offered a chance for rebuttal. If the arguments are not found to be satisfactory, the manuscript will be retracted and the author sanctioned from publishing papers for a period to be determined by the responsible Editor(s).

Arrangement
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The guidelines below should be followed as closely as possible. This will help the editors and reviewers to interpret the aims and value of your research.

An abstract of up to 200 words, structured with the same headings as below, should be provided.

Introduction
This should clearly state the research question and introduce the condition and the clinical or research problem being addressed. Lengthy descriptions of previous evidence, particularly information that may be important for the topic in general but is not strictly related to the research question, should be avoided. At the end of the introduction please clarify what new or complementary information your research is providing with respect to existing knowledge or previous research.

Material and Methods
The section must contain clear information on permissions obtained by ethical committees, inclusion and exclusion criteria, methods of research, variables evaluated and main outcome measures, along with other secondary variables evaluated, definitions used, and statistical analyses.

Results
The findings of the study should be described concisely following the same structure as in Materials and Methods. The text should complement, but not duplicate, the information contained in the tables and figures. Comments on the findings in this section should be avoided.

Discussion
The discussion should be as structured as possible, and contain at least the following paragraphs, each with information responding to the following questions:
- What are the main findings?
- How do they compare with previous studies: which are the similarities and differences and the reasons for them?
- What are the pathophysiological basis and insights reinforced or newly provided by the findings? (If applicable.)
Contents

See the journal website for contents
In this volume of Frontiers in Diabetes dealing with the molecular basis of monogenic disease of beta-cell insulin regulation, world-renowned experts provide in-depth descriptions of the many recent advances in genetic defects that cause hyperinsulinemic hypoglycemia. These disorders comprise the most important form of hypoglycemia in infants and children and are associated with a high risk of morbidity, including seizures and severe brain injury. The discovery of eight different genetic loci involved in congenital hyperinsulinism has led to greatly improved methods of diagnosis and treatment. New approaches to diagnosis are highlighted, such as 18F-DOPA PET scans for preoperative localization of focal hyperinsulinism, as well as potential new treatments, such as green tea polyphenols for G6PD-Hi and GLP-receptor antagonists for SUR1 and Kir6.2 hyperinsulinism. Practitioners, including pediatricians and specialists in endocrinology, surgery, genetics, pathology, and radiology, will find important up-to-date information for clinical diagnosis, management, and new treatments for infants and children with congenital hyperinsulinism. Researchers will discover how genetic hyperinsulinism disorders provide novel insights into the basic mechanisms regulating insulin secretion not only in diabetics, but also in healthy humans.

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The present anatomical atlas concentrates on the early weeks of prenatal development of the human embryo. It comprises more than 800 scanning electron-microscopic pictures of specimens of exclusively human embryos. The three-dimensional appearing illustrations show the development of the external form of the face, neck, trunk and limbs. Besides, the brain and the viscera of the head, neck, thorax, abdomen and pelvis – all dissected into layers – are represented in their position and spatial form.

The juxtaposition of pictures of temporally close developmental stages reveals the changes in the form of the organs. Photographs of the same organic system are usually shown at the same magnification. Simple outline drawings provided with the principal nomenclature facilitate the orientation within the specimens. A brief introduction to each chapter explains the most significant developmental steps depicted.

This atlas is of great interest not only to anatomists, embryologists, histologists and developmental biologists, but also to biologists, biochemists and geneticists. Moreover, it serves as a valuable reference book for clinicians such as gynecologists, obstetricians, pediatric surgeons and pediatric cardiologists.