Resumen

Fetal or intrauterine growth restriction (FGR or IUGR) is a concerning health issue not only due to its implications in mortality and morbidity of neonates but also because of its long-term consequences on health and disease risk of the individuals. Its main cause is an insufficient supply of nutrients and oxygen by maternal (malnutrition or hypobaric hypoxia) or placental factors (placental insufficiency) during late gestation, when the requirements of fetus are higher. The availability of reliable animal models would be highly useful for the future development of diagnostic, preventive and therapeutic strategies. Most of the studies using animal models have been performed in rodents, while the use of large animals (sheep and swine) has been scarce. The objective of the current review is to offer an overview on the possibilities of using large animals for conducting translational research on IUGR related to inadequate maternal conditions and/or placental dysfunction.

Palabras clave

Palabras clave de autor: Animal-models; fetal-growth-restriction; translational-medicine

KeyWords Plus: HIGH-ALTITUDE HYPOXIA; LOW-BIRTH-WEIGHT; PITUITARY-ADRENAL AXIS; INTRAUTERINE GROWTH; PLACENTAL GROWTH; LATE-GESTATION; OBESITY/LEPTIN RESISTANCE; MATERNAL UNDERNUTRITION; CARDIOVASCULAR DEFENSE; DIABETIC PREGNANCY

Información del autor

Dirección para petición de copias: Gonzalez-Bulnes, A (autor para petición de copias)

RA INIA, Comparat Physiol Lab, Avda Puerta Hierro S-N, Madrid 28040, Spain.

Direcciones:

[ 1 ] SGIT INIA, Comparat Physiol Grp RA, Madrid, Spain