

Commentary on “What is the identity of fibroblast pneumocyte factor (FPF)?”

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I thank King *et al.* (1) for their critical review of our knowledge of the identity of fibroblast pneumocyte factor (FPF). However, I must point out some factual errors in the Review. Contrary to the negative findings of Sato *et al.* (2) for the *in vivo* effect of leptin on lung surfactant production, Deblasio *et al.* have subsequently shown effects of recombinant ovine leptin on fetal sheep lung development (3), including increased Surfactant Protein B expression. It should be pointed out that in the former study the investigators used human leptin. It is well known that leptin is highly species-specific (Robert Denver, University of Michigan, Personal Communication). In all likelihood, this is the reason why no effect of leptin on lung surfactant was observed in the Sato study, given the positive results of the Deblasio study in which species-specific leptin was used.

The authors also point out the controversy regarding the existence of lipofibroblasts in human lung, failing to cite Rehan *et al.* (4), showing unequivocally that lipofibroblasts are present in human lung tissue.

There is also no mention of the data regarding the inhibition of FPF by androgens (5). That body of work is important in the present context because it demonstrates the physiologic relevance of endogenous FPF in normal fetal lung maturation, including humans (6). The existence of a sex difference in response to exogenous glucocorticoids first came to light in the NIH Collaborative Trial of Antenatal Corticosteroids,

males being significantly less responsive to exogenous glucocorticoid treatment than females. That observation was followed by a series of basic and clinical studies to determine the nature of male resistance to exogenous glucocorticoid treatment, including dihydrotestosterone antagonism of FPF expression (7). Significantly, leptin is the only one of the three FPF candidates referred to in the King Review (1) known to be inhibited by androgens.

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