

## 2<sup>nd</sup> International Conference on **Endocrinology**

October 20-22, 2014 DoubleTree by Hilton Hotel Chicago-North Shore, USA

### **Towards an understanding of the endocrine disturbance by mild analgesics**

**David M Kristensen**

University of Copenhagen, Denmark

Over the last few years, we have come to realize that so-called painkillers (mild analgesics; e.g. paracetamol, aspirin, and ibuprofen) may have a potent disrupting effects on the hormonal homeostasis, leading to congenital malformation in both animals and humans through anti-androgenic mechanisms (Kristensen et al., 2010, Kristensen et al., 2012). This new area of research has alarming perspectives as around the world use of mild analgesics is increasing - not only in the general public but also among the pregnant women (Thiele et al., 2013). Furthermore, recently published data have unveiled that the public is exposed to paracetamol in large amounts through conversion of ailine in the diet (Modrik et al., 2013). The analgesics are inhibitors of the prostaglandin pathway and in this way relieve pain. We have shown that classics endocrine disruptive compounds such as phthalates, parabenes, and benzophenones are all powerful inhibitors of this same prostaglandin pathway (Kristensen et al., 2011). We therefore propose that the analgesic compounds and classic endocrine disruptors all converge inhibiting the prostaglandin pathway, resulting in endocrine disruption. Our new data indicate possible mechanisms behind this pathophysiological mechanism and raise important questions concerning the exposure to mild analgesics in general!

### **Biography**

David M Kristensen performed his PhD and his first post doc at the Department of Growth and Reproduction, Rigshospitalet/Copenhagen University Hospital, investigating the embryonic origin of testicular cancer and the widespread occurrence of reproductive problems. During these studies, he has first-authored several articles indicating a connection between male reproductive problems and intrauterine exposure to mild analgesics such as paracetamol. After initiating post doc at Department of Biomedical Sciences, University of Copenhagen, he has begun also to focus on the environmental component of the increasing obesity epidemic worldwide.

[david@moebjerg.com](mailto:david@moebjerg.com)