PROGRAM AND ABSTRACT BOOK

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P28.-Evidence of reversible effects of ethinylestradiol after exposure to trenbolone in male eelpout *Zoarces viviparus*.

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The worldwide use of human and veterinary pharmaceuticals and their occurrence in aquatic ecosystems has become a great concern due to their potential as endocrine disrupters. In aquatic ecosystems the interaction of xenobiotics is a common condition; therefore, we wanted to evaluate if trenbolone (TB) modulates the effects of 17α-ethinylestradiol (EE2). Male eelpout (*Zoarces viviparus*) were exposed to 5 ng/L EE2 continuously for 19 days (EE2-C) or discontinuously (11 days, EE2-D) alone or in combination with low (50 ng/L, TBL) or high (500 ng/L, TBH) concentrations of TB (19 days). Exposure to EE2 caused reduced gonadosomatic index, increased concentrations of plasma vitellogenin, lowered concentrations of plasma 11-ketotestosterone, up-regulated vtg and era mRNA expression and severe alterations in gonadal histology. TBL and TBH concentrations counteracted the EE2-induced reduction in 11-KT and era mRNA expression after EE2-D exposure as did TBH concerning vtg mRNA expression. Exposure to both high trenbolone and EE2-C+TBH lead to severe gonadal histology alterations. Low trenbolone and EE2-D+TBH showed less histopathological alterations. These results show that the effects induced by discontinuous EE2-exposure are reversed by the androgen trenbolone.

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