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by using specie-specific painting probes for sex chromosomes. One hundred metaphases were scored and all showed normal XY chromosomal arrangement. No metaphases with two X chromosomes were detected. The observed phenotype and the lack of cytogenetic defects led to state that this clinical case might represent a suspected condition of male pseudo-hermaphroditism. In humans, this condition is related to the androgen insensitivity syndrome (AIS). Further investigation is therefore necessary to identify at molecular level the causes of this abnormal phenotype.

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Cytogenetic survey in autochthonous endangered animal breeds reared in Campania region (Southern Italy): an up-date

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In the Rural Development Plan RDP 2007–2013, Misura 214, e2, project RARECa of Campania (Southern-Italy), three different Institutions (CNR, University of Naples and IZSM) are involved to study, characterize and valorise some autochthonous endangered animal breeds raised in Campania Region. In this report an up-data on the cytogenetic analyses we performed in horse (Napoletano, Salernitano and Persano breeds), cattle (Agerolese breed), pig (Casertana breed), sheep (Laticauda and Bagnolese breeds) and goat (Cilentana breed) are reported. Up to now, upon 63 Agerolese cattle four females (6.3 %) were found to be carriers of: (a) rob(1;29) (2 animals), (b) rcp(11;25) and (c) a case of partial monosomy and trisomy (2n=60,XX,t(11;25)(q11;q14-21). All examined horses (34 animals) from Napoletana (14) and Salernitana (20) breeds showed normal karyotypes. Concerning the

Laticauda sheep (46 animals), two females were found to be carriers of two new reciprocal translocations while Bagnolese sheep breed (32 animals) and Cilentana goat breed (12 animals) showed normal karyotypes. Furthermore, in Casertana pig breed 52 animals were examined and resulted with normal karyotype.

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Chromosomal abnormalities in secondary bovine oocytes matured in vitro up to 48 h

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Preliminary experiments carried out in our laboratory indicated that—by fertilizing oocytes matured in vitro for 24–32 and 48 h—the resulting blastocyst rates decreased from 22.4 % (24 h), to 14.0 % (32 h) to ‘0’ % (48 h). The aim of this study was investigate upon the variation in the incidence of chromosomal abnormalities occurring in bovine oocytes matured in vitro for prolonged periods of time, i.e. from 24 to 32 to 48 h. Abattoir-derived oocytes were matured in vitro using standard procedures, for 24–32 and 48 h. After incubation, the COCs were treated with Ialuronidase (3 mg/ml) to eliminate the cumulus cells, swelled in hypotonic (KCl, 0.075 M) for 5–10 min, fixed individually on microscope slides with Carnoy fixative, air dried and stained with 5 % Giemsa. Conventional karyotypes were prepared from 50 matured oocytes for each time of maturation, providing the following results: chromosomal abnormalities, including unreduced diploid metaphases, hypo-haploidy and hypo-diploidy, increased from 12 % at 24 h, to 20 % at 32 h, to 36 % at 48 h. The Chi-square test (with Yates corrections) showed significant differences ($P>0.01$) in the rate of