

JOINT EVENT

11th International Conference on**Tissue Engineering & Regenerative Medicine**

&

4th International Conference on **Synthetic Biology and Tissue Engineering**

October 18-20, 2018 Rome, Italy

Genetic identification by cytogenetic and molecular biology techniques of sexual ambiguities in Algerian population**Wefa Boughrara^{1, 2, 3}, Meriem Aberkane^{1, 2, 4}, Hammou Benslimane⁵, Fatima Zohra Moghtit^{1, 2, 6}, Mohammed El Amine Akli¹, Nedjma Yahiaoui¹ and Houssam Boulouar⁷**¹Etablissement Hospitalier Universitaire d'Oran, Algeria²Université des Sciences et de la Technologie d'Oran Mohamed Boudiaf, Algeria³Ecole Supérieure en Sciences Biologiques d'Oran, Algeria⁴Université Oran1, Algeria⁵EHS d'Oran, Algeria⁶Centre Universitaire d'Ain Témouchent, Algeria⁷University of Abou Bekr Belkaid, Algeria

Context & Objectives: Sexual ambiguity is defined as a state of a human being whose genital organs are difficult or impossible to define as male or female. These ambiguities are due to various etiologies. The objective of our work is to highlight the role of cytogenetic and molecular diagnostics in the determination of sex.

Materials & Methods: We analyzed six cases of sexual ambiguity with new born to 39 years, collected from the cytogenetics and molecular biology service of the Oran University Hospital (EHU). We reported the analysis of the standard karyotype with Giemsa coloration to search the sex chromosomes. Moreover, we explored all regions of the Y chromosome for possible deletion or translocation using multiplex PCR.

Results & Discussions: In this study, the karyotype shows a genetic sex opposite to the civil one in one case. In authors case suspected as female patient, the karyotype formula shows a mosaic turner syndrome (46, XY/45, XO). The multiplex PCR show a deletions of Y chromosome regions in four cases respectively; SY86 locus (case n°3), SY208 locus (case n°4), SRY locus and of SY145, SY152, SY242, SY208, SY254, SY255, SY157 locus (case n°6).

Conclusion: In this study, we highlighted the role of karyotype and multiplex PCR in the cases of sexual ambiguity studied. Indeed, it represents the first orienting element towards the real nature of sex. We have thus shown that the cytogenetic and molecular study occupy an important place in the etiological diagnosis of these sexual ambiguities.

wefaboughrara@gmail.com