P1709 FERTILITY PRESERVATION FOR YOUNG ADULT ACUTE LYMPHOBLASTIC LEUKEMIAS IN ITALY: A CAMPUS ALL SURVEY.

**Topic:** 35. Quality of life, palliative care, ethics and health economics

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**Background:** Survival rates have improved in the last decades in children and adolescent and young adults (AYA) with acute lymphoblastic leukemia (ALL). This is rising concerns about the late effects related to both cancer itself and its treatment. Fertility issues are well recognized in cancer survivors. In a study on AYA women with cancer, pregnancies were 38% less likely than in the general population. Moreover, an American survey showed that only 25% of patients with cancer had a documented discussion about fertility issues and preservation with their treating physicians, with less than 15% of patients being referred to a specialist. Lower rates were recorded among patients who already had children. A recent British survey showed inconsistencies in the same country about fertility preservation management, despite being recommended in local and international guidelines. Moreover, new emerging techniques for harvesting and preserving gametes are changing the fertility preservation scenario, especially for women.

**Aims:** Track down fertility preservation management in AYA with ALL.

**Methods:**

We conducted a survey within the Italian Campus ALL group about gamete preservation. 16 centers responded to the survey, for a total of 803 AYA patients (489 males, 315 females) treated between 2005 and 2020. All country geographic areas were represented. The survey consisted in a first part about the existence of center-specific fertility preservation guidelines, the presence of a specialized medical counseling for fertility and a dedicated evaluation at diagnosis (AMH/semen analysis/etc). A second part was gender-specific, with questions on gamete cryopreservation habits, percentage of successful procedures and age limits for cryopreservation. For women, we asked whether a hormonal contraceptive therapy was routinely performed during chemo. The third part was about the presence of a specialized medical counseling for fertility and a dedicated evaluation at diagnosis (AMH/semen analysis/etc). A second part was gender-specific, with questions on gamete cryopreservation habits, percentage of successful procedures and age limits for cryopreservation.

**Results:**

The survey showed that only 50% of centers have specific guidelines for gamete cryopreservation and while in all of them fertility is discussed with the hematologist, only in 50% of centers the patient is referred to a fertility specialist.
Moreover, while sperm cryopreservation is offered in all centers with high success rates (median 85%), only 25% of centers routinely offer oocyte or ovarian tissue harvesting and storage, with marked differences with regard to both age limits and success rates. Moreover, in 25% of centers the cryopreservation costs are not covered by the public health system. Only 50% of centers have the facilities to perform the preservation of gametes in their own institution.

**Summary/Conclusion:** We found relevant differences between centers in the referral to specialists, fertility evaluation at diagnosis, access to fertility preservation procedures by sex and age, and economic coverage by Italian public health system. Great inconsistencies were noted even in the same geographic area, probably because of the regional management of public health in Italy. The first step towards improving the situation is the institution of national guidelines for fertility preservation in AYA patients with cancer and specifically ALL. Guidelines should aim at standardizing and improving communication with patients about gonadotoxicity and at standardizing gamete preservation procedures particularly for women in light of the available and future techniques. A centralized funding of fertility preservation is needed in order to reduce inequality among regions.