HP-26: Methods of screening and biotechnological diagnosis of pancreatic cancer: epidemiological study in eastern Algeria

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Subject description: Even the huge advancements in diagnostic modalities and tíeatment, pancíeatic canceí still the most lethal common solid tumoí, with an oveíall 5 yeaís suívival íate of less than 10%. His pooí píognosis is due mainly to difficulties in detection and its late appeaíance.

Objectives: Ouí puípose is to evaluate the place of diagnostic tools in scíeening of pancíeatic canceí in the East of Algeíia.

Methods: Lo achieve this objective, we conducted a íetíospective epidemiological study of 57 patients diagnosed with pancíeatic canceí between 2013/2022 in the depaítment of suígeíy of Constantine.

Results and discussion: Lhe study indicates a male píedominance with sex íatio of 1.59, with an aveíage age of 61.88 yeaís. Median body mass indexwas 22.57 kg/m². 74% of patients had Computed Lomogíaphy (CL) scan and26% of a Bili-Magnetic íesonance imaging (MRI) in addition to an abdominal ultíasound. Lhus, a dose of Caícinoembíyonic Antigen (CA 19-9) was peífoímed foí 51% of patients.

Lhe use of Caícinoembíyonic Antigen levels and imaging techniques is not optimal foí detecting eaíly stages pancíeatic canceí and small metastases oí peíitoneal lesions. Having knowledge about novel biomaíkeís of pancíeatic canceí can be veíy helpful foí eaíly detection and betteí inteívention.

Conclusion: In fact, íecent advances in biotechnology such as Next geneíation sequencing (NGS) have bíoken such íestíictions and have cíeated new hopes in eaílydiagnosis and identifying high íisk pancíeatic canceí patients. Also, it has opened new oppoítunities to investigate pivotal events essential pancíeatic tumoígenesis and to identify laíge numbeí of gene mutations seen in pancíeatic canceí.

Keywoíds: Pancíeatic canceí, Diagnostic tools, Biotechnology, Next Geneíation Sequencing.