Debate

1548

How can molecular biology make a significant contribution to the treatment of cancer

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1. **Burkitt lymphoma:** initialy described in Africa is the most frequent abdominal lymphoma in European children. t(8;14)(8;22) and (2;8) are found in this B Lymphoma. A translocation with chromosome 2 is found for B Lymphoma with kappa light chain and a lambda chain is found with a (8; 22) translocation. The molecular steps who explain the proliferation of a B monoclonal tumor is very well understood. From 1980 to 1999 survival in Burkitt lymphoma stage III and IV mooved from 20% to 90% WITHOUT ANY CONTRIBUTION OF MOLECULAR BIOLOGY TO THESE RESULTS.

2. **Ewing sarcoma** is a bone rumor were a t(11;22) is found. This translocation is pathognomonic of peripheral neuro ectodermal tumor and very useful for diagnosis. Olivier Delatre had reported several transcript variant with survival difference and absence or not of the transcript in blood and marrow is of significance as far as prognosis is concerned. A 7 years old boy was found with a bone tumor. Despite 3 biopsies no diagnosis was found and no malignant cells were observed. At a fourth biopsy pathology was still no conclusive but a t(11;22) was found in the tumor. DID MOLECULAR BIOLOGY ALONE ALLOWED TO TREAT THIS CHILD?... NO.

3. N Myc is an oncogene found in 30% of *agressive neuroblastoma* in children. In localized children N Myc is clearly associated with a bad prognosis whereas in stage IV more than 2 years, N Myc+ and N Myc− children did not showed a different outcome. N MYC IS NOT ABLE TO CONTRIBUTE TO THE TREATMENT OF AGRESSIVE NEUROBLASTOMA.

In conclusion dramatic progress in therapy had been observed in childhood cancer in tumor were molecular biology had made a dramatic contribution to the pathophysiology and/or to the diagnosis of the disease. However no contribution of this molecular biology to treatment is found after 20 years *i.e. to understand a disease or to cure a disease are still independant factor.*

Plenary Lecture

1550

Abstract not received.