

## Progress in Treatment of Advanced Non-Hodgkin's Lymphoma in Children – Report on Behalf of the Polish Children's Leukemia/Lymphoma Study Group

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### A. Introduction

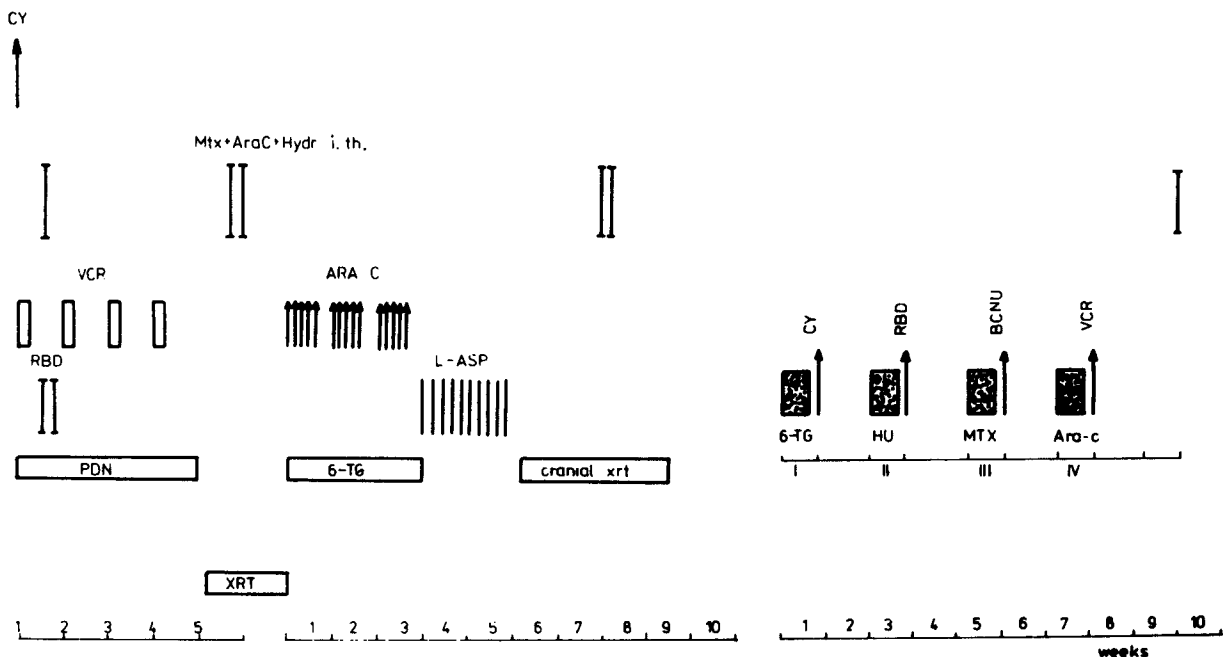
It is well known that children with non-Hodgkin's lymphoma (NHL) are highly curable by modern treatment schedules [3]. As has been reported, with the LSA<sub>2</sub>L<sub>2</sub> protocol the Polish Children's Leukemia/Lymphoma Study Group was able to cure about 90% of NHL children in stages I and II [2]. However, the outcome of disseminated NHL, particularly with initial central ner-

vous system (CNS) or bone marrow (BM) involvement and B-cell histology remained unsatisfactory [2]. Therefore, between 1983 and 1986 two other therapy modalities, COAMP [1] and the Murphy [3] protocols were applied for children with nonlocalized NHL.

### B. Material and Methods

Two hundred and four children with highly malignant NHL entered this multicenter study. The Kiel histologic classification scheme was used. The clinical staging was done according to the criteria of Murphy et

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**Fig. 1.** Modified LSA<sub>2</sub>L<sub>2</sub> protocol. *CY*, Cyclophosphamide 1200 mg/m<sup>3</sup> i.v. *VCR*, Vincristine 1.5 mg/m<sup>2</sup> i.v. *RBD*, Rubidomycin 60 mg/m<sup>2</sup> i.v. *L-ASP*, Asparaginase 10000 µ/m<sup>2</sup> i.v. *6-Tg*, Tio-

guanine 75 mg/m<sup>2</sup> o. *BCNU*, Belustine 60 mg/m<sup>2</sup> o. *Mtx*, Methotrexate 10 mg/m<sup>2</sup> o. *Mtx*, 6,25 mg i.th. *Ara-C*, 30 mg i.th.; hydrocortisone i.th. 30 mg; cranial *xrt*, cranial Cobalt

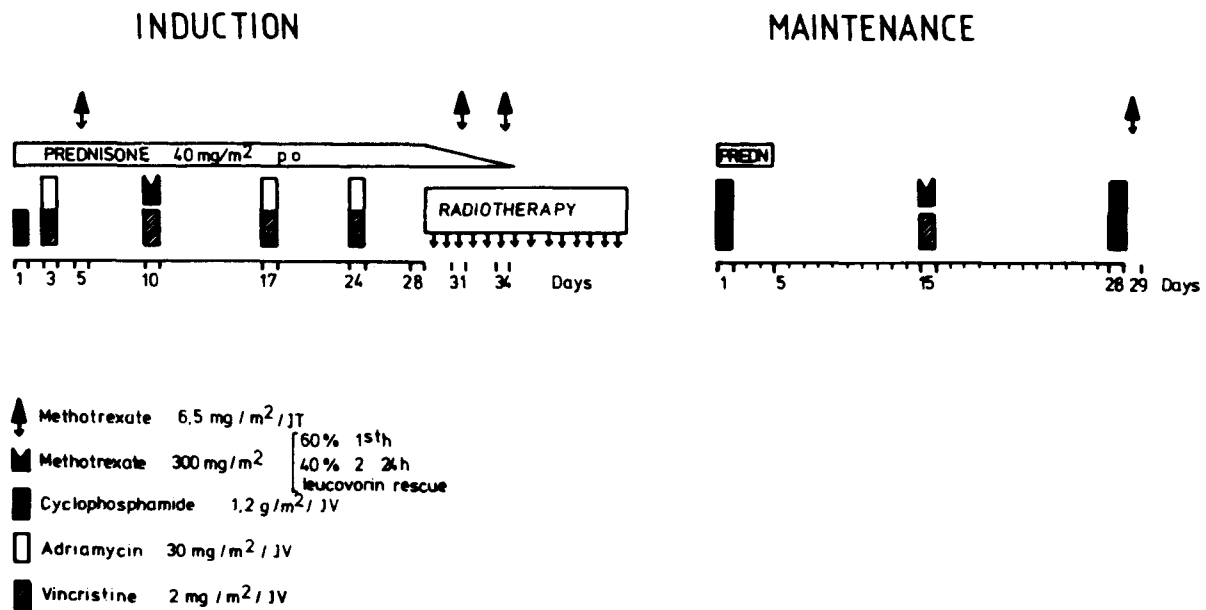


Fig. 2. The COAMP protocol

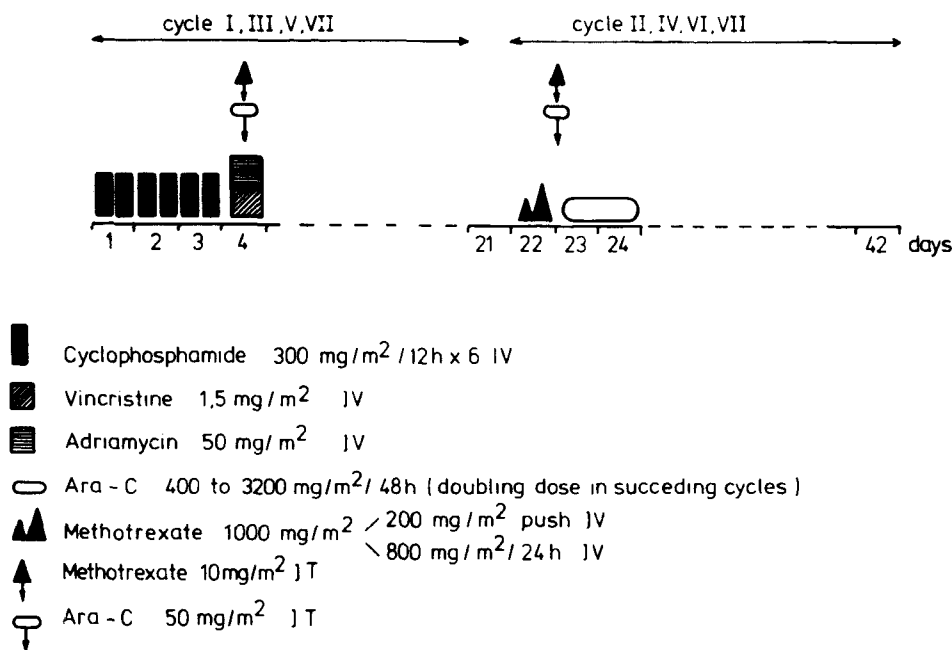


Fig. 3. The Murphy-Bowman protocol

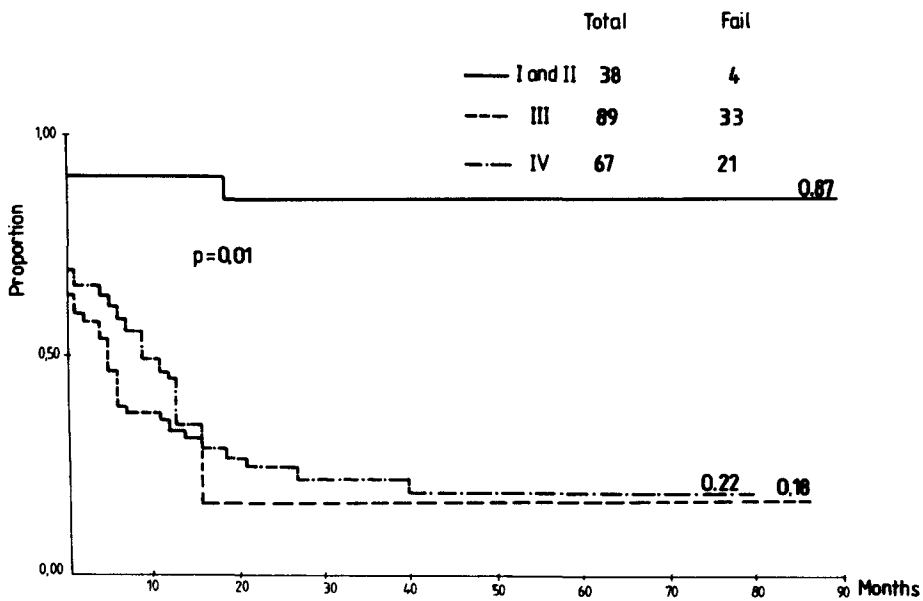
al. [3]. The therapy protocols are outlined in Figs. 1-3.

### C. Results

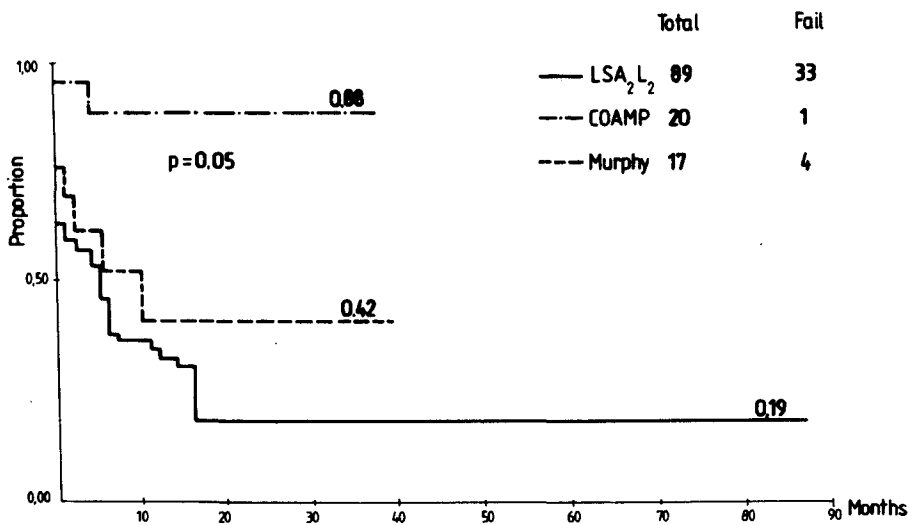
The comparison of actuarially estimated event-free survival rates in children with stages III or IV treated according to the three different regimens and the influence of

primary tumor location and B cell immunology on the outcome of treatment are shown in Figs. 4-8.

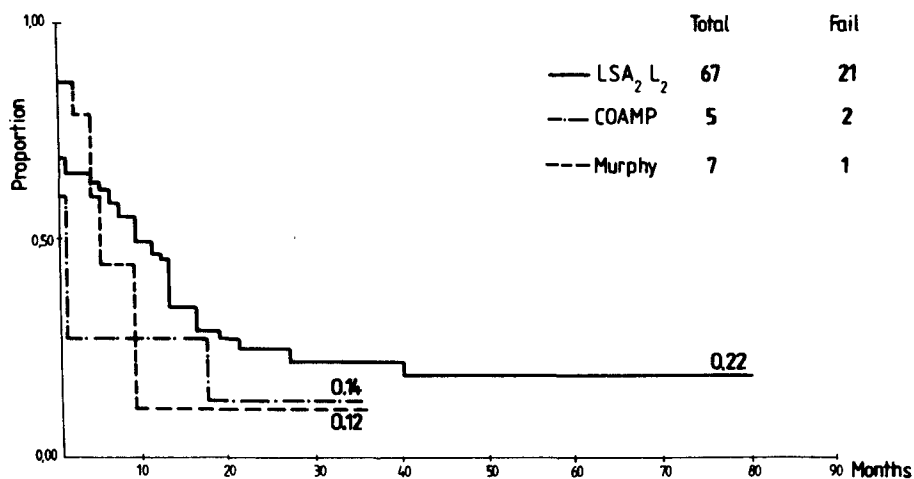
A comparison of the effects of the three therapy modalities in nonlocalized disease indicates that the most promising results are achieved with the COAMP program in stage III, including NHL with a mainly abdominal location and B-cell histology. It is evident, however, that the treatment results in



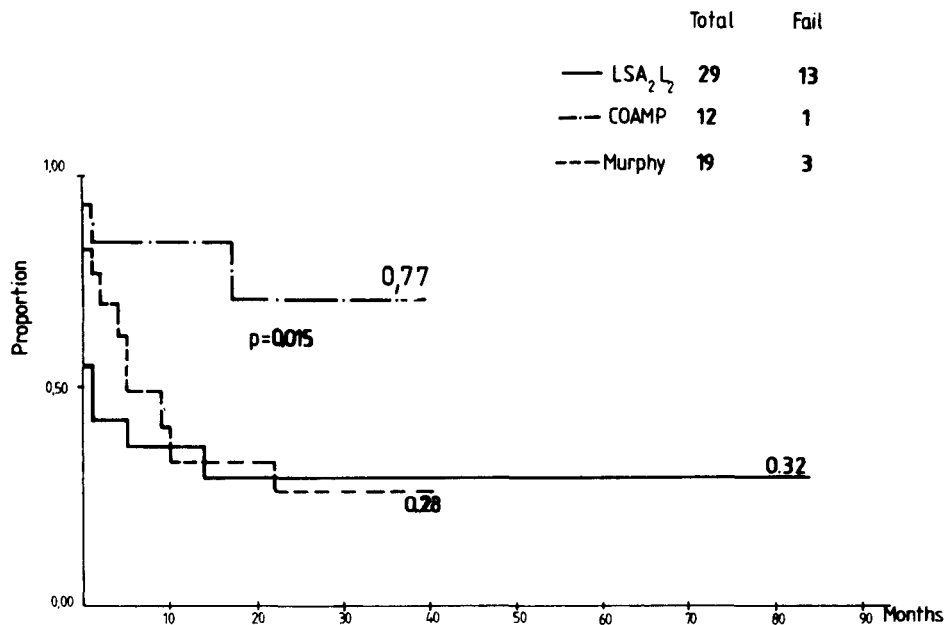
**Fig. 4.** Probability of event-free survival of children with NHL stages I–IV treated with the LSA<sub>2</sub>L<sub>2</sub> regimen



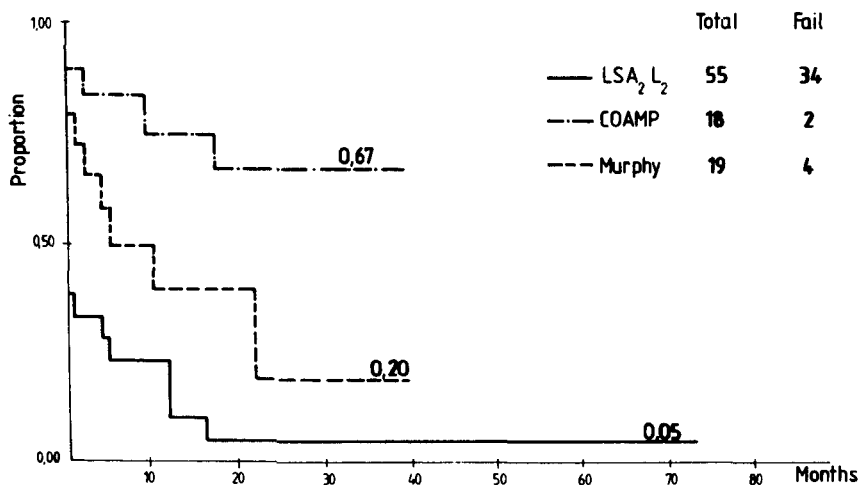
**Fig. 5.** Comparison of event-free survival of children with stage-III NHL using three different regimens



**Fig. 6.** Comparison of event-free survival of children with stage-IV NHL using three different regimens



**Fig. 7.** Comparison of event-free survival of children with stage-III and -IV NHL using three different regimens



**Fig. 8.** Comparison of event-free survival of children with stage-III and -IV NHL with a mainly abdominal location using three different regimens

children with initial CNS or BM involvement remain highly unsatisfactory with all the protocols used.

## References

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