

سامية محمد مصطفى



شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم



سامية محمد مصطفى



شبكة المعلومات الجامعية



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



سامية محمد مصطفى



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

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بالرسالة صفحات لم ترد بالأصل





**CARBOHYDRATE ANTIGEN CA 125, SERUM
THYMIDINE KINASE AND HAPTOGLOBIN IN
PATIENTS WITH HODGKIN'S DISEASE
AND NON HODGKIN'S LYMPHOMA**

THESIS

**SUBMITTED FOR PARTIAL FULFILLMENT
OF THE DEGREE OF M.Sc.
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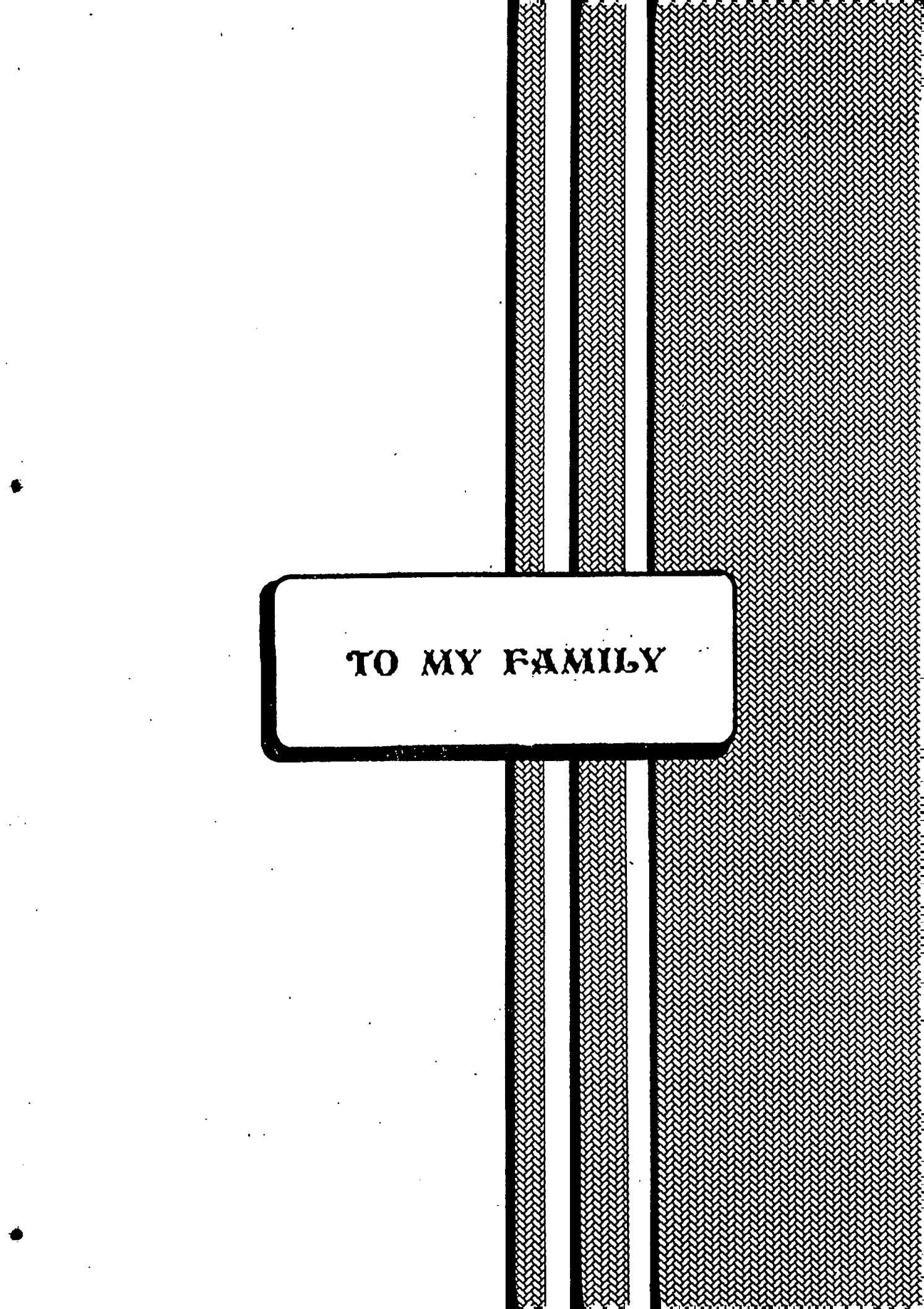
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TO MY FAMILY

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***INTRODUCTION
AND AIM OF THE WORK***

INTRODUCTION AND AIM OF THE WORK

Neoplastic proliferation of cells of the lymphoid series can give rise to solid tissue tumours, the malignant lymphoma. This type of tumour occurs in all age groups, both sexes, all races and in all broadly defined geographic areas (Barbara and Tindle, 1984). Malignant lymphoma is not a single tumour, but the term encompasses a spectrum of disease process which range in aggressiveness from very indolent cellular proliferation which appear to be lesions of slow accumulation that may take years to become noticable in the affected individual to highly aggressive and rapidly proliferating processes which may become rapidly fatal in few weeks if left untreated (Barbara and Tindle, 1984).

Recently the search has been continued to find the best tumour marker that could be helpful in diagnosis of malignant lymphoma and differentiating the disease from common non neoplastic causes of lymph node enlargement whether infective, inflammatory or chemical. Nevertheless these markers should be helpful in following therapeutic response. The tumour markers based on monoclonal antibodies have opened a promising new field. Of these new markers, (Carbohydrate Antigen 125) CA 125 was one of the first to become available for clinical use. It is an antibody against a membrane glycoprotein of the serous ovarian cancer cell line (Bast et al., 1981). Besides its use in diagnosis and follow up of ovarian cancers, this marker has been proved to be of value in gastric, colorectal and lung cancer (Diez et al., 1991). However, reports focusing on the role of CA 125 in malignant lymphoma are few. Thus, Liu et al (1991) studied the levels of CA 125 in non- Hodg-

kin's lymphoma, where they found an overall positive rate of 54.1% of cases. They reported that serum CA 125 is probably no more than an indicator of peritoneal stimulation released by tumour invasion rather than a tumour product. Unfortunately, the role of this marker in the follow up of disease remains to be elucidated.

Thymidine kinase (TK) is key enzyme in the salvage pathway for DNA synthesis (allowing the cell to reutilize endogenous thymidine for DNA strands), and in cultured cells its cytoplasmic activity is linked with proliferation (Bello, 1974). Serum Thymidine kinase levels had been reported to have clinical and prognostic relevance in lymphoproliferative disease where high levels are linked with advanced disease and short survival lengths (Bello, 1974).

Haptoglobin is an acute phase reactant, belonging to α_2 - glycoprotein. The primary function of Haptoglobin appears to be the irreversible binding of free oxyhemoglobin in plasma (Daniels, 1975). Increases in plasma Haptoglobin concentration occur in acute phase reactions and in conditions such as burns and nephrotic syndrome when large amounts of fluid and lower molecular weight plasma proteins have been lost (Daniels, 1975). Haptoglobin has been reported to be a valuable tumour marker in many malignant disorders (Lundqvist et al., 1991), but its role in malignant lymphoma remains to be determined.

The present study was performed in a trial to demonstrate the role of CA 125, Thymidine kinase and Haptoglobin in diagnosis of malignant lymphoma and to study changes in their levels following treatment with fixed regimens of chemotherapy according to the type of lymphoma.