which becomes manifest after the administration of adrenaline, cortisone, insulin, etc.

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Recovery of Leukæmogenic Agent from Non-Leukæmic Tissues of Thymectomized Mice

It has been shown by Gross and others[1] that filtrates of leukæmic tissues are leukæmogenic following injection into new-born mice of a low-leukæmic strain, and that total thymectomy prevents the development of lymphocytic leukæmia in inoculated mice[2]. On the other hand, normal thymuses grafted to inoculated thymectomized hosts as late as 6 months after thymectomy develop lymphocytic neoplasms[3]. It follows, therefore, that a leukæmogenic agent might be recoverable from the tissues of inoculated mice up to 6 months or more after thymectomy.

Six-months old *C3Hf/Gs* mice, which had received an intraperitoneal injection of passage *A* filtrate (a potent leukæmogenic filtrate) at or soon after birth and had been thymectomized at 3–4 weeks of age, were killed, and extracts were prepared from their spleens or brains. Miroscopic examination of these organs did not reveal any leukæmic cells or any other abnormality. Some of the spleen cells were transplanted to normal adult *C3Hf/Gs* mice, but these remained free from leukæmia during a total period of observation of 8–9 months. The spleen and brain extracts were inoculated intraperitoneally into new-born *C3Hf/Gs* mice, which then received no further treatment. As can be seen in Table 1, 60–80 per cent of the mice in the experimental group developed leukæmia as early as 3 months after birth. No leukæmia developed in 13 control mice inoculated with brain and spleen extracts prepared from untreated 6-month-old *C3Hf/Gs* mice.

Extracts from non-leukæmic tissues of inoculated thymectomized hosts were passaged through successive generations of thymectomized mice and finally into non-thymectomized mice. Leukæmias are already appearing in the group with intact thymuses, suggesting that: (1) multiplication of the leukæmic agent has taken place each time during transfer through thymectomized hosts; (2) the thymus is not a necessary site for replication of the agent since in the last two generations of thymectomized hosts the material was injected after thymectomy. These results will be published in full detail when the results are complete.

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Effect of a Primary Tuberculous Infection on the Resistance of Male and Female Mice to Ectromelia

A tuberculous infection or vaccination with *BCG* has been shown to raise the resistance of mice and guinea pigs not only to a challenge with mycobacteria but also to secondary infections caused by other species of bacteria. This latter, non-specific type of immunity has been demonstrated against infection with *Brucella abortus*[1], *Bacillus anthracis* and *Brucella suis*[5], *Staphylococcus aureus*[2], *Pasteurella pestis*[3] and *Salmonella enteritidis*[6]. The present work was undertaken to see whether a primary tuberculous infection also increased the resistance of mice to virus infections, using in the first instance ectromelia (mouse pox) as the test virus.

Male and female mice, strain *VS*, aged 7–9 weeks (weight 18–20 gm.) were each divided into two groups.

Table 1. The Development of Lymphocytic Leukæmia in Mice inoculated with Extracts of Non-leukæmic Tissues of Thymectomized Passage *A*-inoculated Mice

Donor material		Recipient		Mice with lymphocytic leukæmia		
		Number	Age at injection	Number	Age in months	Per cent
Passage *A*-inoculated thymectomized 6-months-old *C3Hf/Gs* mice	Brain extract	16	1 day	10	3–6 (av. 4·1)	63
	Spleen extract	14	1 day	11	3–5 (av. 3·8)	80
	Spleen cells	8	2–3 months	0	—	0
Untreated 6-month-old *C3Hf/Gs* mice	Brain extract	6	1 day	0	—	0
	Spleen extract	7	1 day	0	—	0

Total period of observation 8–12 months.