

Public (1897) Department.

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G.O., No. 996

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[Despatch Abstract.]

Dr Calmette — Collection of Snake-venom.

Court to the Surgeon General the request of the Govt of India that Medical Officers be asked to collect and prepare venom in accordance with certain instructions for transmission to Dr. Calmette, Director of the Pasteur Institute at Lille, engaged in the preparation of serum for the treatment of snake-bites.

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

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G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

Government {1897} of Madras. PUBLIC.

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1897.

Enclosures

Spare copies

G.O., No. 996, 26th July 1897.

JULY.

Dr. Calmette—Collection of Snake-venom.

Communicating to the Surgeon-General the request of the Government of India that medical officers be asked to collect and prepare venom in accordance with certain instructions for transmission to Dr. Calmette, Director of the Pasteur Institute at Lille, engaged in the preparation of a serum for the treatment of snake-bites.

GOVERNMENT OF MADRAS.

PUBLIC DEPARTMENT.

READ—the following paper :—

From J. P. HEWETT, Esq., C.I.E., Secretary to the Government of India, Home Department (Medical), to the Chief Secretary to the Government of Madras, dated Simla, the 12th July 1897, No. 726.

I am directed to state that Dr. Calmette, Director of the Pasteur Institute at Lille, is engaged in the preparation of a serum for the treatment of snake bites, and that the Government of India have been requested to arrange for the supply of as much venom as can be procured in India.

2. I am accordingly to request that, with the permission of the Governor in Council, medical officers may be requested to collect and prepare venom in accordance with the accompanying instructions which have been sent by Dr. Calmette. The venom should be despatched to the office of the Director-General of the Indian Medical Service for transmission to Dr. Calmette at Lille. The species of snake from which the venom has been extracted should be stated on each packet, as also the date on which the venom was dried.

ENCLOSURE.

INSTRUCTIONS for the collection of snake-venom intended for the inoculation of animals furnishing anti-venomous serum.

A.—If living captive snakes can be procured, it is easy enough to make them produce considerable quantities of venom for several months.

For this purpose, it is desirable to confine them in a wire cage lined with glass in order to prevent the snakes wounding their heads against the wires. On the upper side of the cage is arranged a trap-door large enough to admit of the reptiles being firmly seized by means of a running noose of plain leather attached to the end of a cane, or by means of long-handled tongs with claw grips.

To collect the venom, the snake is seized securely by the neck with noose or tongs and fastened firmly without wounding it against a board or on a table. A specimen glass or a small conical beaker is then introduced between the jaws of the reptile, which immediately strikes it several times, ejecting a smaller or larger quantity of venom.

The venom is at once introduced into a vacuum exsiccator, or if the apparatus or a vacuum pump is not at disposal, it may be evaporated under a large bell-jar by placing the specimen glass or beaker containing the venom above a receiver filled with sulphuric acid or fused calcium chloride.

In a few hours the venom is dry. It resembles a small mass of yellowish resin scaly and readily pulverised. The products from each evaporation are mixed in a small well-closed vial, or better in a piece of thin glass tubing which is then sealed at both ends in the flame.

In this condition, the venom does not alter; it can be kept for a very long time without losing its activity and may be sent through the post.

B.—If it is necessary to collect the venom contained in the glands of a dead snake, then the following method is convenient :—

The reptile being laid on a straight wooden board, the upper part of the head and neck is fixed with pins. The lower jaw is removed with scissors. With the aid of a bistoury, the two venomous glands, which are situated on either side of the upper jaw immediately under the skin behind the eyes, are carefully dissected. In this operation it is essential not to damage the glands,

otherwise the greater part of the liquid contents is lost in the surrounding tissues. One after the other is raised, from the front backwards, by means of forceps, and conveyed in a small beaker or specimen glass to a convenient place to express the venom that they contain. The expressed glands are thrown away. It is only necessary then to evaporate the venom in the same way as above, either in vacuum or under a bell-jar containing a recipient of sulphuric acid or fused calcium chloride.

When there is no convenience at all at hand for evaporating the venom, one must be content to remove the glands from the dead snake, and preserve them in flasks containing a small quantity of pure glycerine. The quantity of glycerine ought not to exceed that of the glands in volume. In this condition also the venom preserves its toxic properties for a long time and can be sent through the post in tin boxes.

All persons who desire to collect snake-venom in this way themselves, are requested to send their products to the Pasteur Institute of Lille (Nord) France. This venom is used to inoculate the animals (horses and asses) that furnish the anti-venomous serum.

Two doses of anti-venomous serum will be exchanged for one gramme of dry venom of all species of venomous snakes.

ORDER—No. 996, Public, dated 26th July 1897.

Communicated to the Surgeon-General for the necessary action.

(True Extract.)

Chief Secretary.

To the Surgeon-General.
„ Sanitary Commissioner.

Encl. P. Seetharam

Public (1897) Department.

CURRENT No. 2680

H. M.

Order W. 996826 July 97.
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Communicated to the
General Surgeon for the necessary
action.

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23/7/97

Cc. H.
22/7/97

From
The Medical
No. 726

Dated 12.
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SUBJECT.

Requesting that Medical
officers may be requested
to collect and prepare
venom for transmission
to Dr. Calmette at
engaged in the preparation
of a serum for the
treatment of snake

To
The Surgeon General
Sanitary Comm.

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