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l. lenzini
p. rottoli

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MEDIASTINOSCOPY AND MEDIASTINAL BIOPSY IN LUNG SARCOIDOSIS

LODI R.,MORANDI U., ROMANO A., MAZZERA E.,TAZZIOLI G.

FONTANA G.,PELLEGRINO M.

Department of Surgical Semeiotics and Thoracic Surgery and Department of Tisiology and Pulmonary Disease.
University of Modena.Modena . Italy.

Riassunto

Gli autori, esaminando le indicazioni e i limiti della mediastinoscopia riferiscono la loro esperienza personale, basata su un totale di 470 casi. Di questi, 262 casi erano studiati per sarcoidosi mediastino polmonare con una positività diagnostica del 98% e una incidenza di rischio molto bassa. Nella sarcoidosi, il metodo si è dimostrato valido per 1) la alta incidenza di positività (adenopatia bilaterale mediastinica), 2) la relativa facilità di esecuzione linfonodi mobili non infiltrati, 3) la possibilità di eseguire uno studio istopatologico per stabilire lo studio della malattia, 4) la possibilità di ripetere l'esame per seguire lo sviluppo della malattia. Gli autori confermano l'importanza di una collaborazione sempre più stretta durante l'intervento, con il citologo, per risultati immediati e per eliminare le biopsie non-significative.

The importance of microscopic diagnosis of the mediastinal lymphnodes in broncopulmonary disease is well known.

The diagnostic reliability of the mediastinoscopy(Carlens 1959) is well proved,and other techniques of biopsy(Daniels 1949-Harkens et. al.1954-Radner 1955) are today of limited value.

Mediastinoscopy and mediastinal biopy technique have been diffusely described(Carlens 1959),and in trained hands are safe, simple and reliable,because of the possibility to perform specifically determined biopsies(Lodi et al.;1968;Pastorelli et al. 1970).

METHODS

The technical approach to mediastinoscopy we use,is as described in the literature (Carlens 1959).

In our experience during the blunt dissection of the trachea from the pretracheal fascia,is possible to explore the peritracheal area to isolate the lymph nodes and to select the targets of our biopsies the lymphatic stations below the aortic arch,below the carina,in front and to the left of the aortic arch are difficult to reach for specifically determined biopsies.

Typically in sarcoidosis the hyperplastic lymph nodes do not contract adhesions with the surrounding tissues and allowed us to isolate and to remouve them.

This possibility is very limited in other neoplastic or inflammatory diseases(e.g.:tb,silicosis,aspeciphic fibrosis). (Stemmer et al. ;1965).

RESULTS

Since January 1970 in our department of Thoracic Surgery,470 diagnostic mediastinoscopy have been performed (TABLE I)

As can be seen,mediastinoscopy is a highly significative mean in differential diagnosis of benign mediastinal adenopaty.

In this series a high incidence of microscopic diagnosis of sarcoidosis,can be noticed.

The latter includes purely localized mediastinal sarcoidosis (either isolated forms or multiple pseudotumoral forms).

As can be seen over 262 cases of sarcoidosis mediastinal biopsy was positive in 257 cases.

The exams were performed at all stages of the disease.

CASE STUDY OF MEDIASTINOSCOPY AND MEDIASTINAL BIOPSY

TYPE OF DISEASE	TOTAL CASES	HISTOLOGICAL RESULTS		COMPLICATION
		POSITIVE	NEGATIVE	
SARCOIDOSIS	262	257	5	1 PNX
LUNG CANCER	80	73	7	1 Vasc. Les.
HODGKIN'S DIS.	57	56	1	1 Vasc. Les.
tb LYMPHNODES	15	13	2	
THIMOMA	27	23	4	
ASPECIPHIC LYMPHADENITIS	9	9		
SILICOSIS	2	2		
SILICOSIS tb	4	3	1	
MISCELLANEA	14	12	2	
TOTAL	470	449	22	3

TABLE I

We stress the necessity of a cytological examination of the bioptic tissue during the mediastinoscopy.

The mediastinoscopy in our hands,in sarcoidotic patients has had a minimal complication.

CONCLUSION

In our experience in sarcoidosis,mediastinoscopy and biopsy,is of particular value in its mediastino-pulmonary form because of its clinical latency and the frequent negativity of cutaneos and laboratory tests even in radiologically advanced forms.

In other types of invasive mediastinal pathology we indicate the mediastinoscopy only in selected cases in view of an otherwise impossible histopathologic diagnosis(Jolly et al. 1980)

In sarcoidosis we consider the mediastinoscopy and biopsy a higly valuable diagnostic tool because of:

- the highly positive diagnostic percentage (99%)
- the semplicity and the low morbility of the procedure due to absence of lymphonodal adhesion and curability of its possible complications(Sarin et al. 1969;Hajek et al. 1970.)
- the contribution to clariphy the stage of intranodal diffusion and the staging of the disease
- the possibility to repeat the mediastinal biopsy to evaluate the efficacy of the medical tratment.

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