



Prommegger-Sanatorium Kettenbrücke-IBK

Mb. Basedow-Pro-Thyoidektomie

Rupert Prommegger

Sanatorium Kettenbrücke
Innsbruck

Herbstfortbildung Feldkirch 2022



- 8 -

konnten, daß wir damit immer noch unter dem Durchschnitt lagen und manche Spitäler Mortalitätsziffern bis zu 48 % aufzuweisen hatten. Heute gelingt es, wie Sie wissen, durch entsprechend geduldige und konsequente Vorbehandlung so gut wie immer, den Basedow in eine euthyreote Form überzuführen, die fast ohne Risiko operiert werden kann.

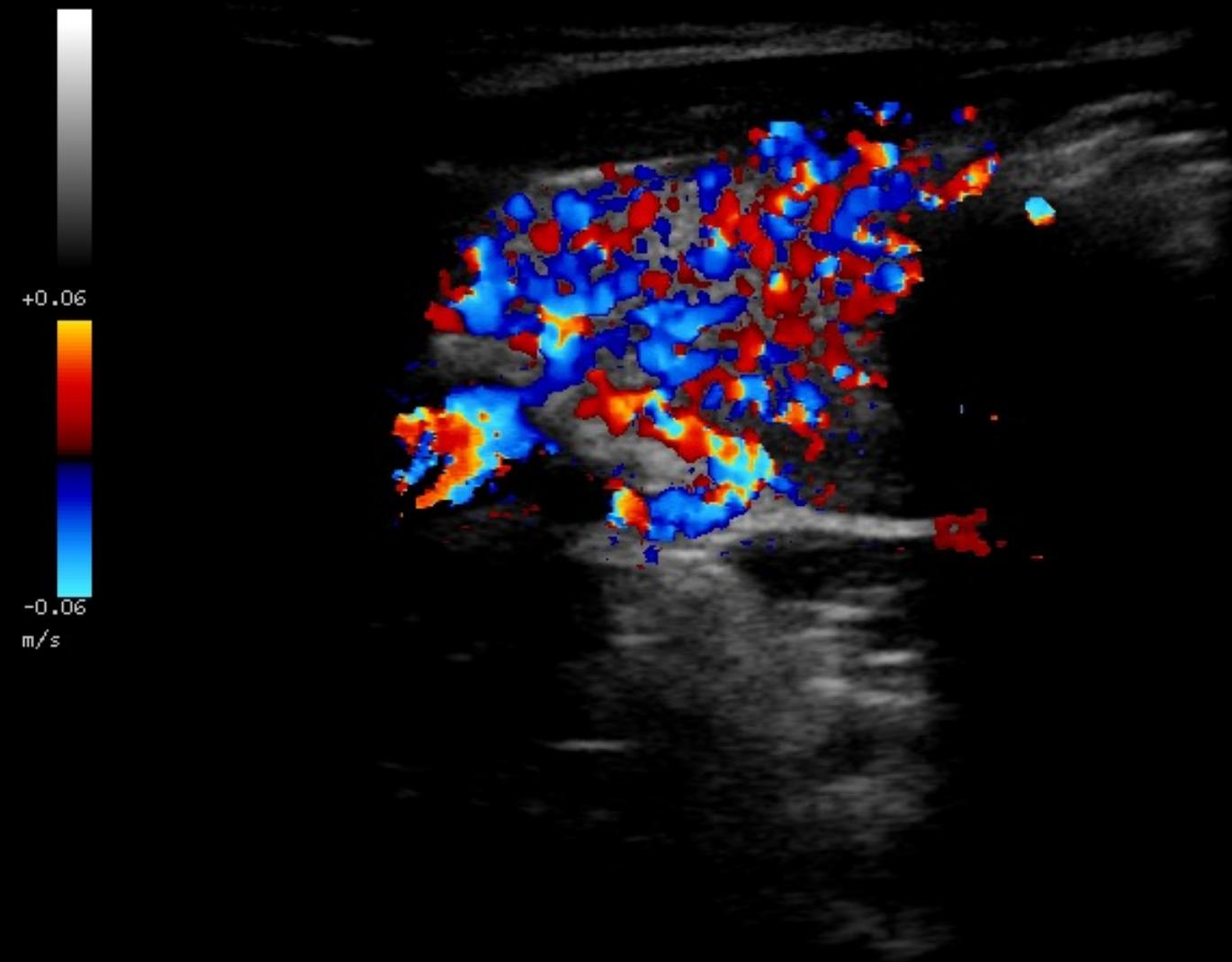


Noch ein Ereignis aus meiner Innsbrucker Assistentenzeit möchte ich nicht übergehen: meine erste Teilnahme am Deutschen Chirurgenkongress in Berlin 1951, also gerade vor 40 Jahren. Eines der Hauptthemen auf dieser Tagung befaßte sich mit dem Basedow. Das Operationsrisiko war damals fast durchwegs noch erschreckend hoch, obwohl sich die Plummer'sche Jodvorbereitung schon überall durchgesetzt hatte. Wir kamen an der Klinik unter eine Sterblichkeitsquote von 17 % nicht herunter. Es war zwar ein schwacher, aber doch ein Trost, als wir aus dem chirurgischen Hauptreferats Sauerbruch's entnehmen

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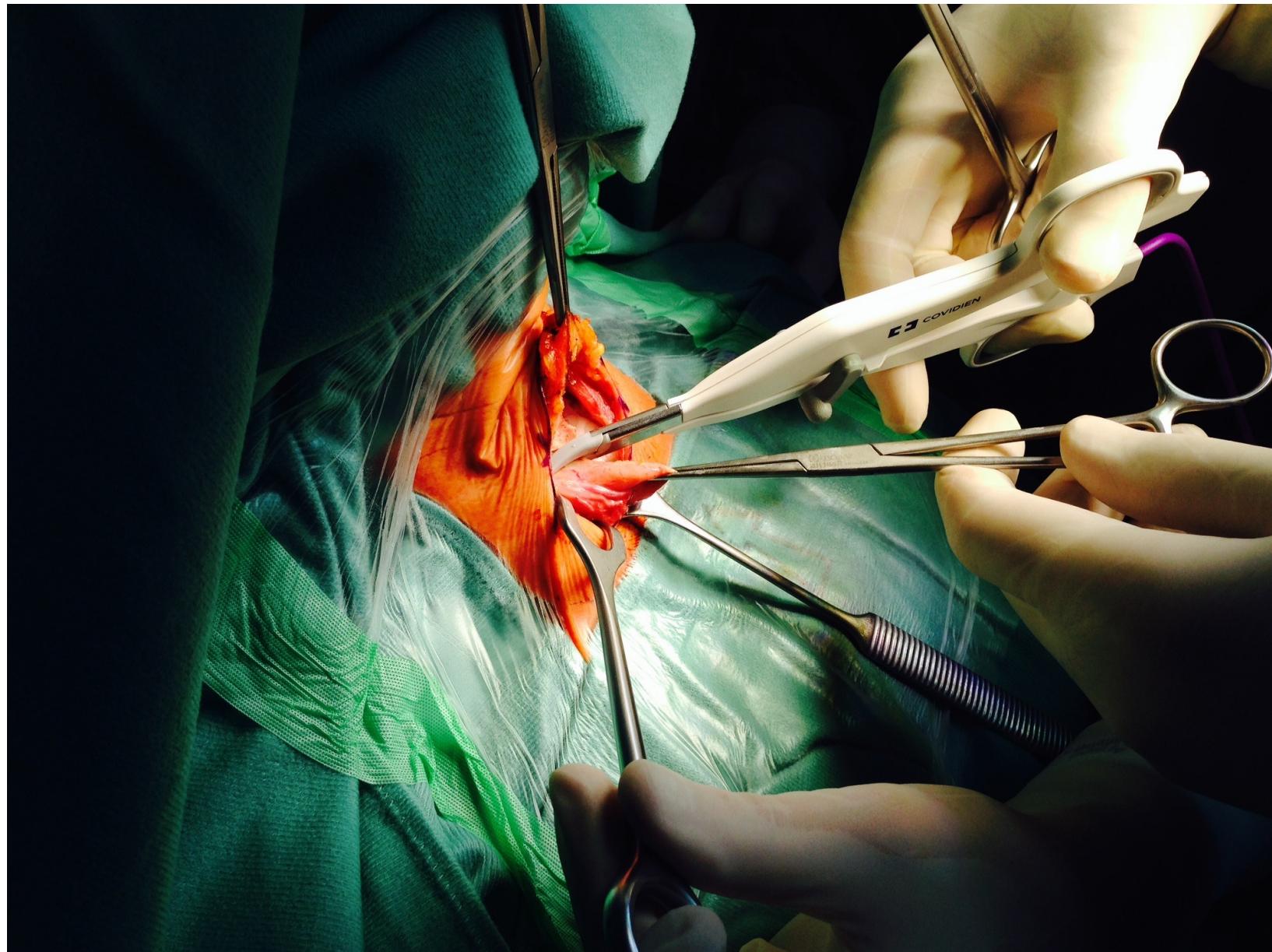
B F 12 MHz V 70% CFM F 6.6 MHz V 76%
T 5 cm XV C PRF 1.0kHz
PRC 10-3-H PERS 4 PRC 3-N-H PERS 4
POST C#2 WF N S |

THYROID LA523





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Verlauf der Basedow Erkrankung ohne Therapie

50% verstorben

25% mit Erkrankung langfristig überlebt

25% dauerhafte Remission



The American Association of Endocrine Surgeons Guidelines for the Definitive Surgical Management of Thyroid Disease in Adults

TABLE 17. Considerations for Selection of Surgery Rather Than Radioactive Iodine for Treatment of Thyrotoxicosis

- Pregnancy or desire for pregnancy within 6 months
 - Concern for thyroid malignancy
 - Goiter >80 g
 - Moderate or severe Graves ophthalmopathy
 - Social issues (infants, small children in the home, unable to follow RAI safety measures)
 - Poorly controlled hyperthyroidism requiring rapid normalization of thyroid hormone levels
 - Airway compromise necessitating urgent resolution
 - Other central neck pathology requiring surgery (primary hyperparathyroidism, large size (>4 cm) or multiple benign thyroid nodules)
 - Prior radioactive iodine treatment
 - Low % iodine uptake
-

MANAGEMENT OF GRAVES' DISEASE

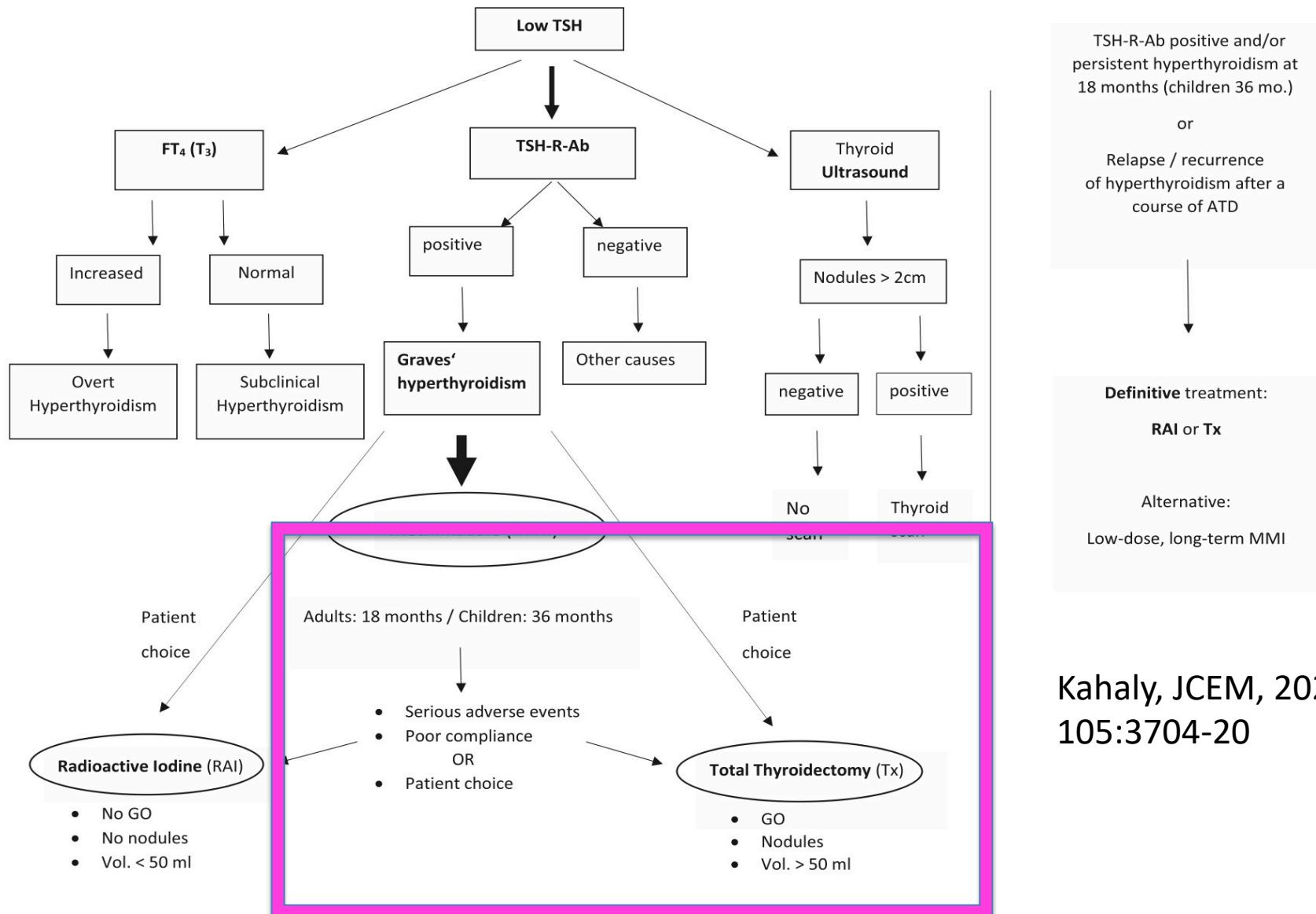


Figure 1. Algorithm for the management of Graves' hyperthyroidism. TSH-R-Ab, thyrotropin receptor antibodies; FT4, free thyroxine; T3, triiodothyronine; scan, thyroid scintigraphy; MMI, Methimazole; RAI, radioactive iodine; TX, total thyroidectomy; GO, Graves' orbitopathy; mo., months.

Kahaly, JCEM, 2020
105:3704-20



GREAT Score

Graves Recurrent Events After Therapy

3 Risikoklassen

Junges Alter

T4 Wert

TRAK Höhe



Cochrane database review 2015 Nov 25;

Thyroid surgery for Graves disease and Graves ophthalmopathy, Liu et al.

5 RCTs mit 886 Patienten

Rezidiv

Subtotal bds 20/283

Dunhill 8/309

TT 0/150



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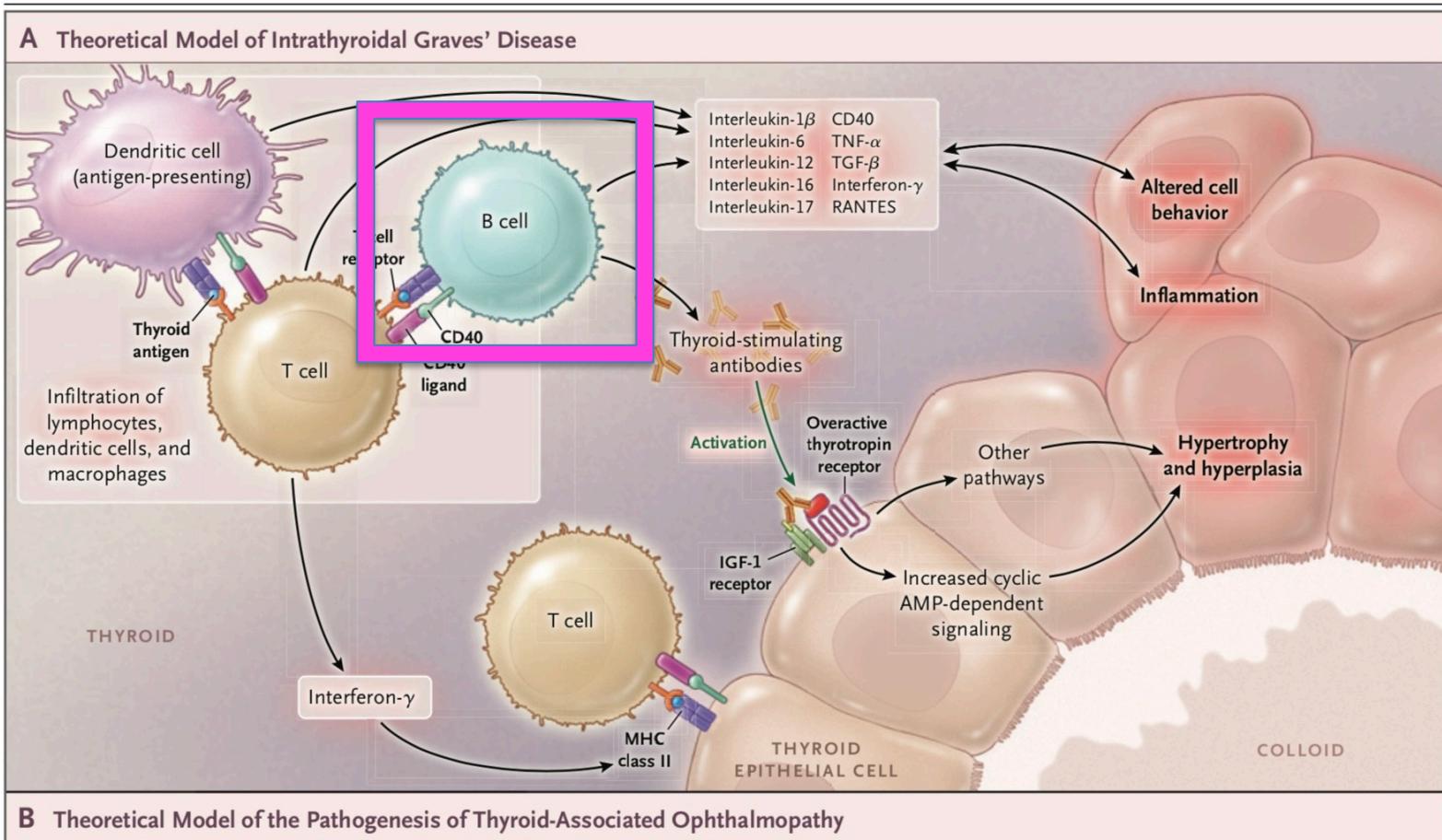
Dunhill 8/309

TT 0/150

Totale Thyroidektomie

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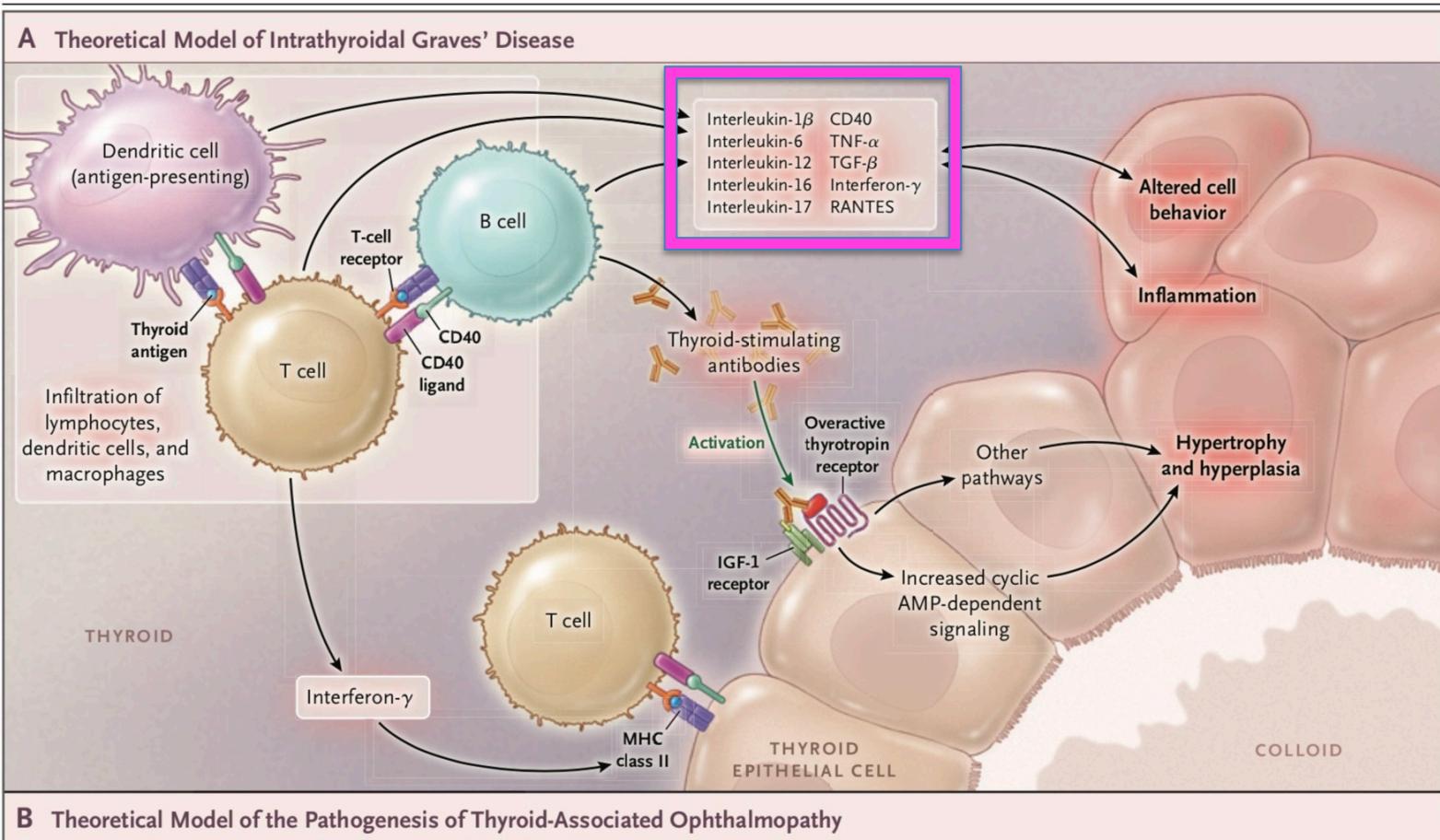
The NEW ENGLAND JOURNAL of MEDICINE



NEJM, 2016; 375: 1556

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The NEW ENGLAND JOURNAL of MEDICINE



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Basedow in operierter Rezidivstruma



Basedow in operierter Rezidivstruma

schwierigste Schilddrüsenoperation



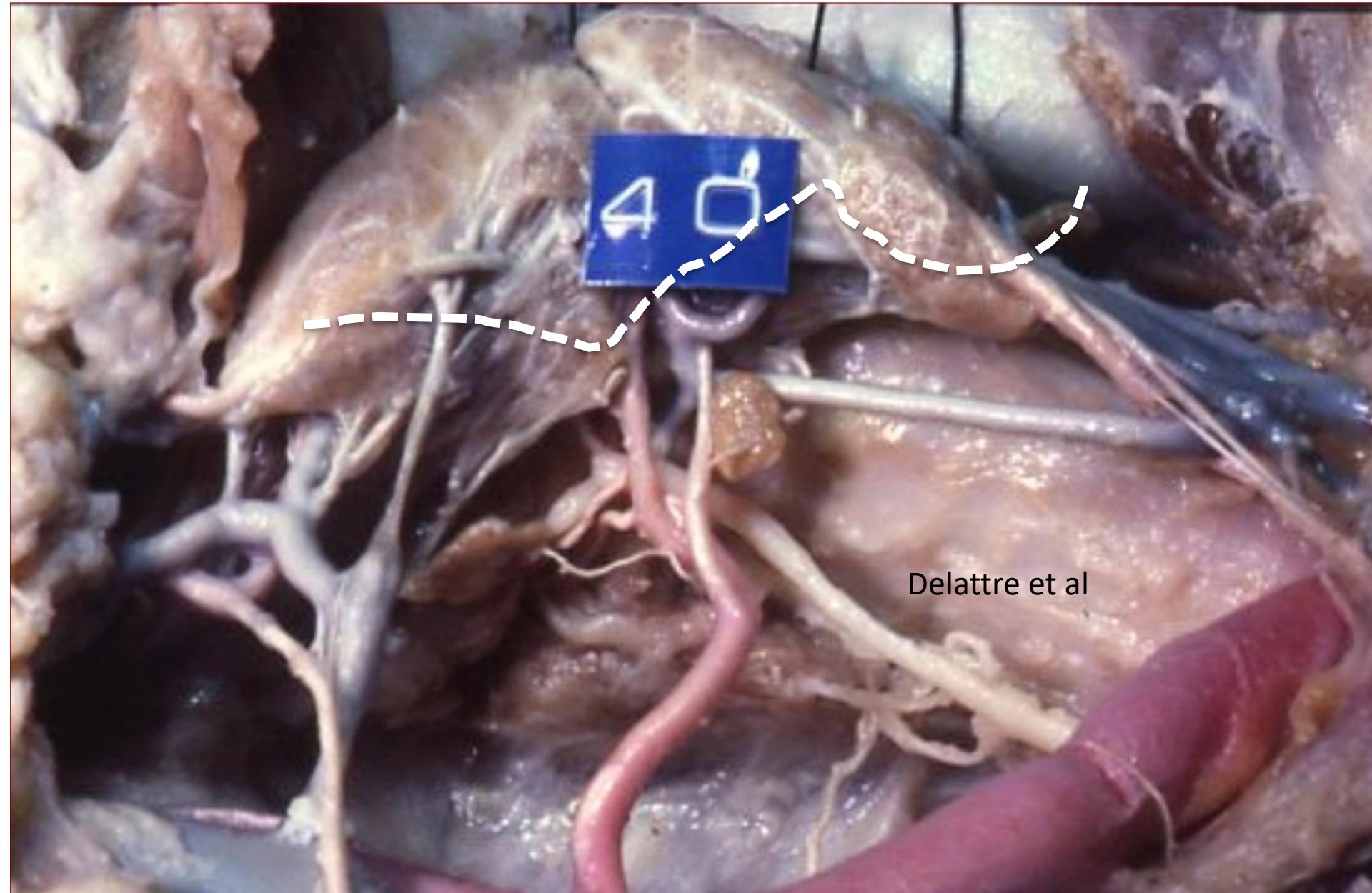
Die Erkrankungen der Schilddrüse
B. Breitner 1928

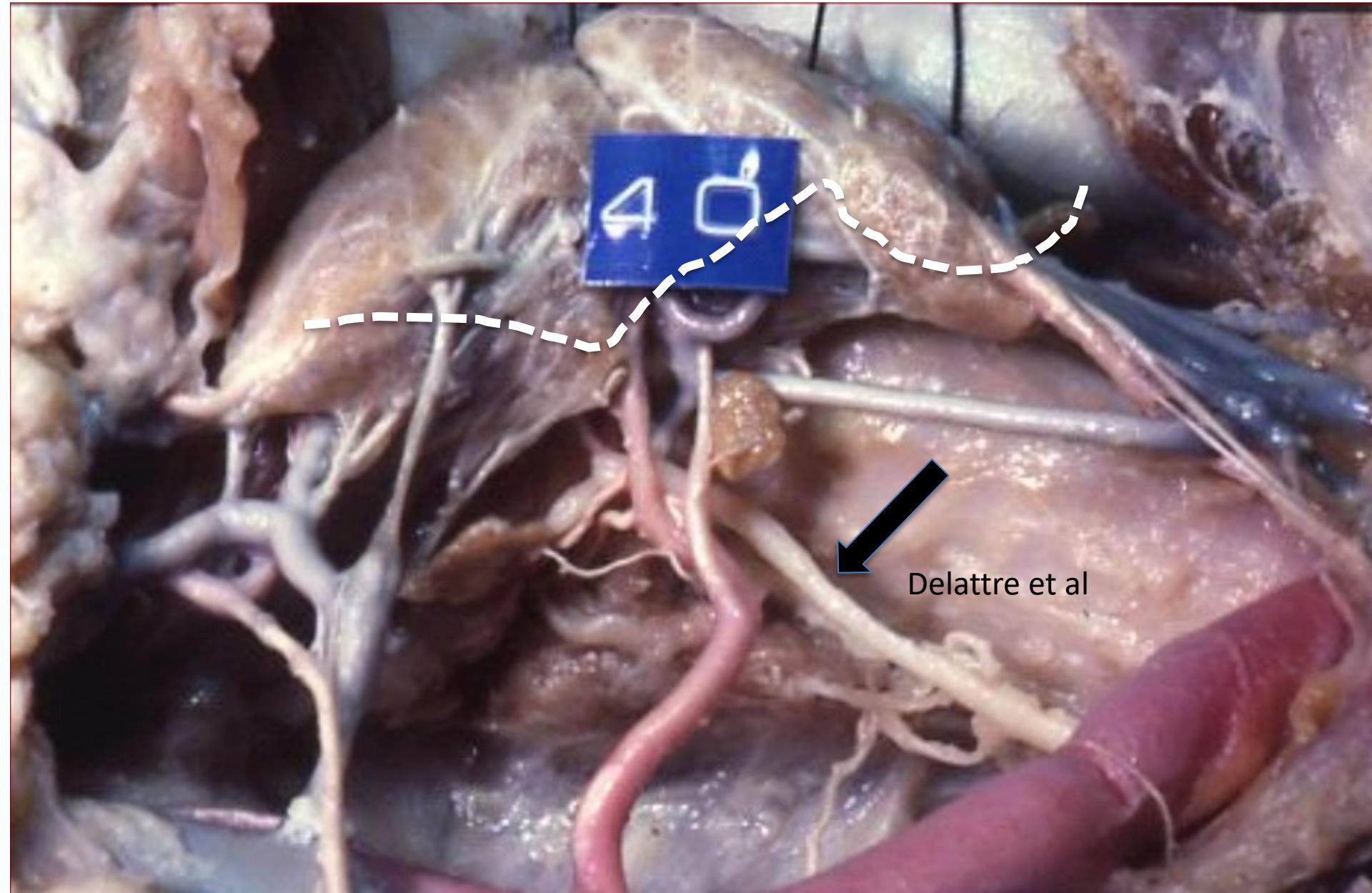
Mortalität der parathyreopriven Tetanie

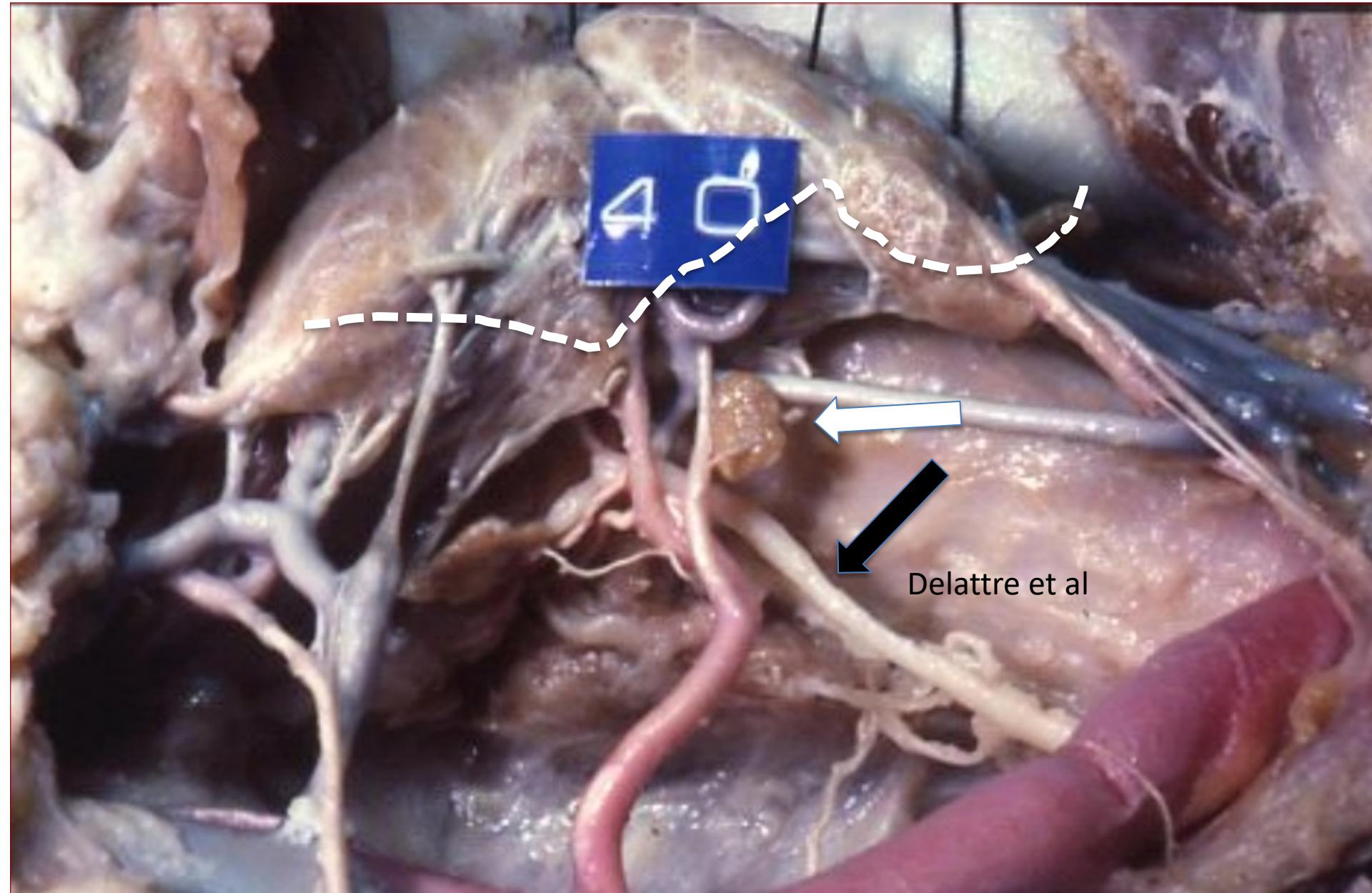
25%

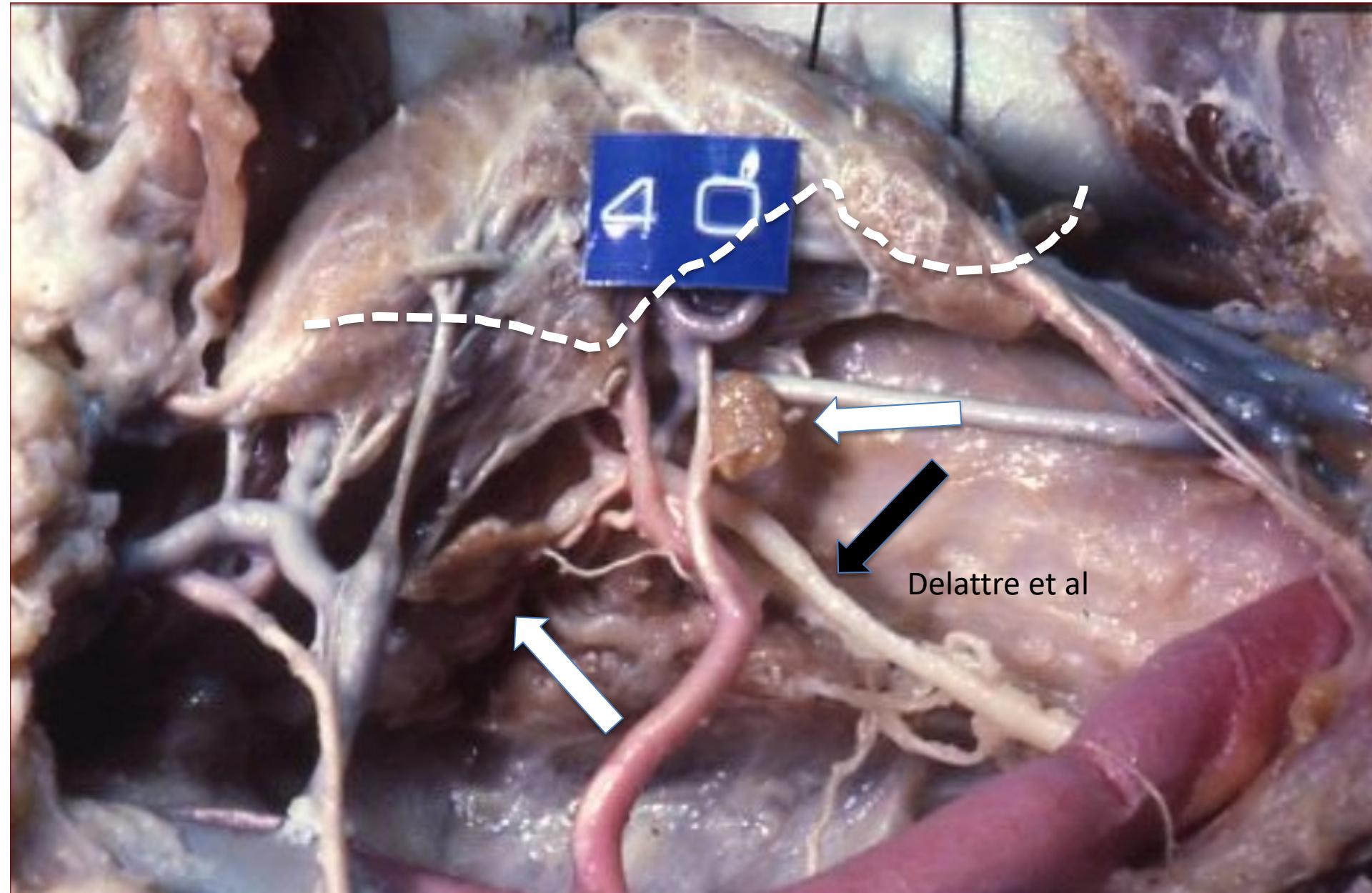
Gulecke, 1913

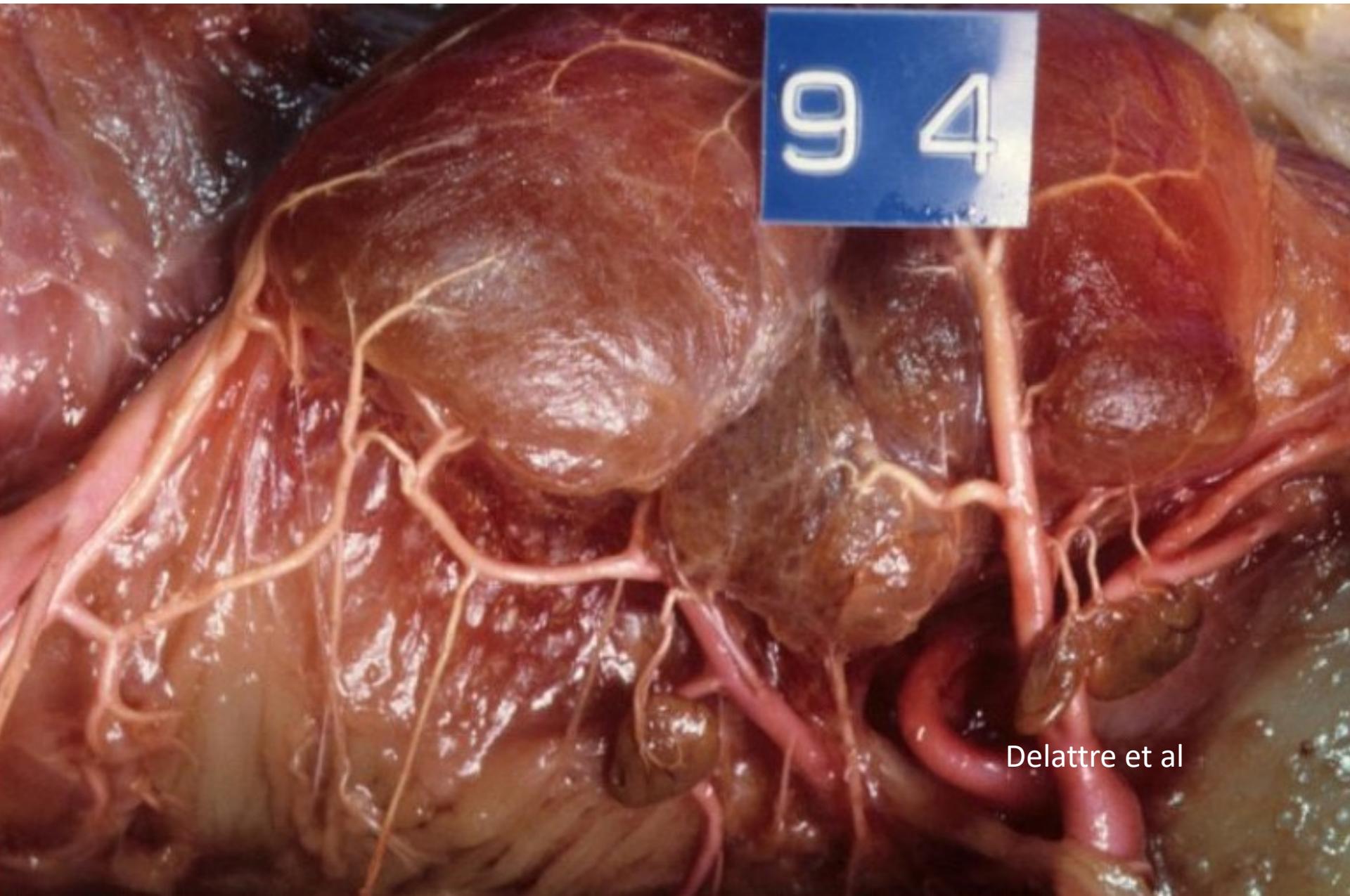
Neue d. Chir. Heft 19M







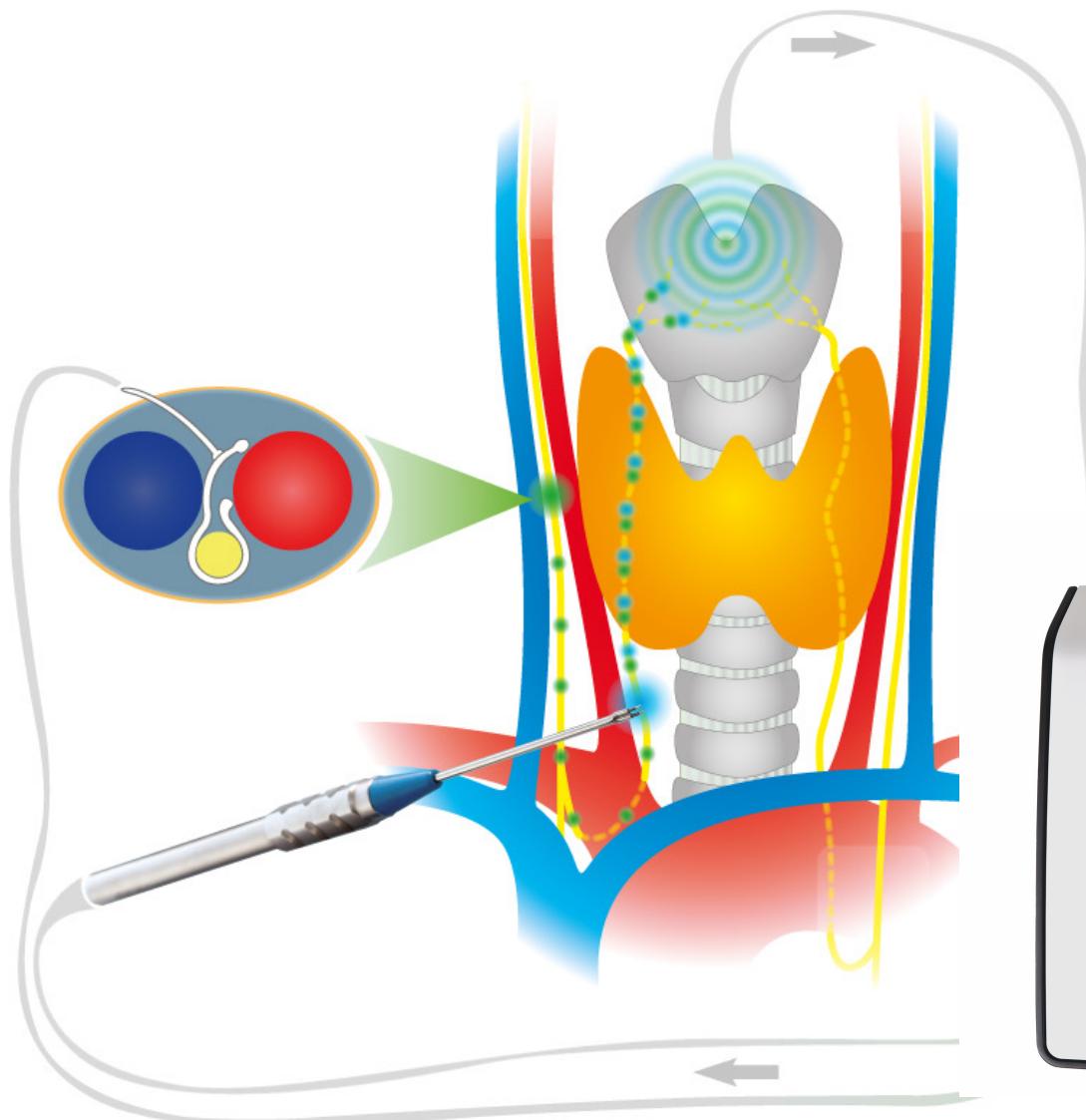




Delattre et al



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Kinetic analyses of changes in Serum TSH Receptor Antibody Values after Total Thyroidectomy

Yoshitake et al. Endocrine Journal 2016; 63:179-185

45 Pat. Mit Mb. Basedow

Hohe TRAK Werte

Totale Thyroidektomie

EO ($p=0,001$)

Rauchen ($p=0,004$)

Serum TG Spiegel >0,5ng/ml ($p=0,039$)

War mit einer signifikant längeren HWZ der TRAK assoziiert



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after Total Thyroidectomy*

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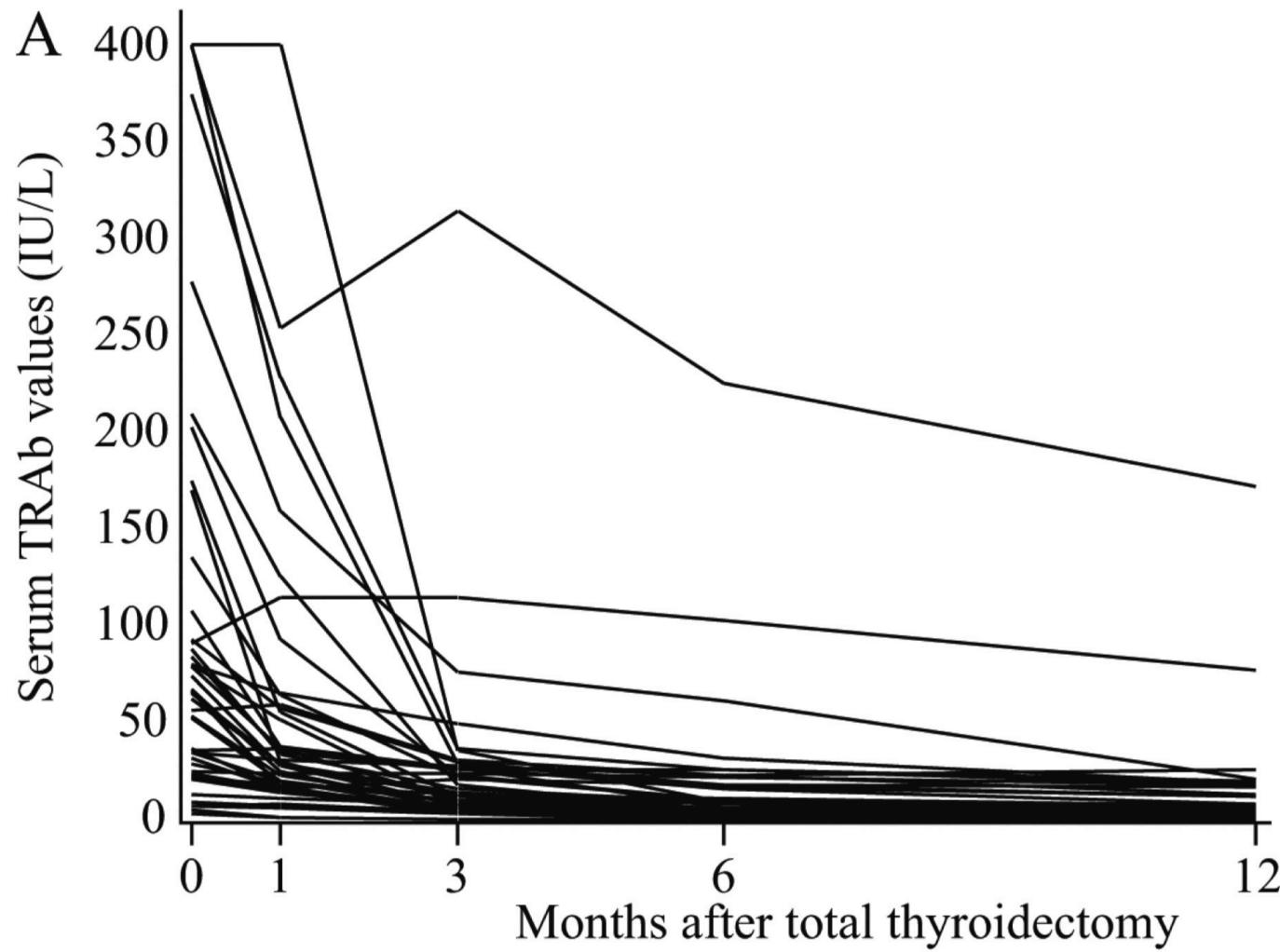
45 Pat. Mit Mb. Basedow

Hohe TRAK Werte

Totale Thyroidektomie

Mediane TRAK HWZ

<i>Ohne EO oder Rauchen</i>	<i>93 d</i>
<i>Mit EO oder Rauchen</i>	<i>162d</i>
<i>Mit EO und Rauchen</i>	<i>357d</i>





› *Surgery*. 1994 Feb;115(2):240-5.

Thyroid surgery in untreated severe hyperthyroidism: perioperative kinetics of free thyroid hormones in the glandular venous effluent and peripheral blood

M Hermann ¹, B Richter, R Roka, M Freissmuth

Affiliations + expand

PMID: 8310413

Abstract

Background and methods: It is generally believed that thyroid surgery in Graves' disease requires a euthyroid state to avoid thyrotoxic reactions. We carried out a prospective study on 23 patients who had severe hyperthyroidism with free thyroid hormone concentrations (fT₃ or fT₄) exceeding the upper normal boundary by 300% or more and who were not pretreated with thyrostatic agents. We determined hormone levels during operation in the thyroid venous effluent before and after surgical trauma and monitored their postoperative elimination kinetics.

Results: The concentration of fT₃ and fT₄ in the venous effluent of the hyperactive gland did not exceed the peripheral levels. Surgery did not induce any intraoperative or postoperative increase in fT₄ or fT₃, whereas thyroglobulin concentrations rose sharply. Both fT₄ and fT₃ followed biphasic elimination kinetics, and a significant decline of circulating free hormone concentrations was measurable within the first postoperative hour.

Conclusions: Contrary to widely held assumptions, the surgical trauma does not stimulate the release of thyroid hormones. Hence this mechanism cannot account for the postoperative development of thyroid storm. Our observations imply that immediate operation should generally be considered for the emergency treatment of an imminent thyroid storm.



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Conclusions: Contrary to widely held assumptions, the surgical trauma does not stimulate the release of thyroid hormones. Hence this mechanism cannot account for the postoperative development of thyroid storm. Our observations imply that immediate operation should generally be considered for the emergency treatment of an imminent thyroid storm.

7 Patienten mit Basedow in der manifesten Hyperthyreose operiert

β-Blocker

Cortison

nicht das geringste Problem



Pat. W, 31a, Mb. Basedow

Leberversagen unter Prothiucil

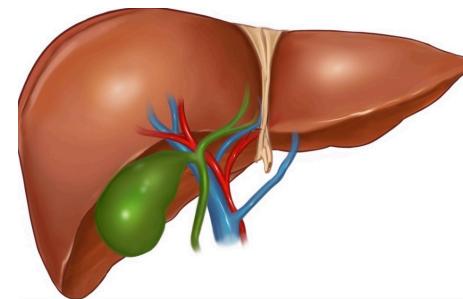
HU LTX

Multiple Revisionen

Persistierende Hyperthyreose trotz aller Massnahmen inklusive Plasmapherese

Nach 6 Mo TT unter Cortison und β -Blocker

Problemlose Thyroidektomie, ca 60 min OP Zeit!



Zusammenfassung

Totale Thyroidektomie

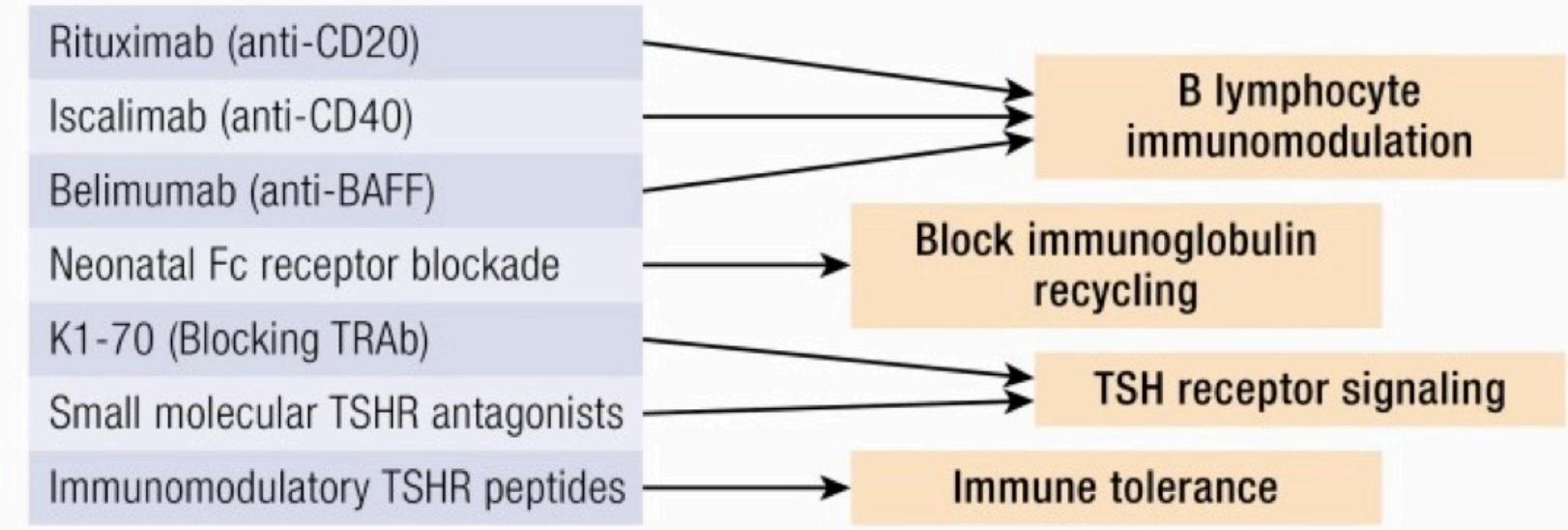
Große Struma >50ml

Assoziierte Knoten

Endokrine Orbitopathie

Kinderwunsch/junges Alter/NW Thyreostatika

New therapeutic horizons for Graves' hyperthyroidism



Lane C. et al., Endocr Rev 2020; 41:873-84



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