SPECIFICITY EVALUATION OF TRCReady® MTB AND TRCReady® MAC FOR IDENTIFYING MYCOBACTERIUM TUBERCULOSIS COMPLEX, MYCOBACTERIUM AVIUM AND MYCOBACTERIUM INTRACELLULARE

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Abstract  [Objective] To evaluate the specificity of TRCReady® MTB and TRCReady® MAC (Tosoh Bioscience, Japan) for identifying M. tuberculosis complex (MTC), M. avium and M. intracellulare.

[Method] We tested TRCReady® MTB and TRCReady® MAC using TRCReady®–80 (Tosoh Bioscience, Japan), which is an automated nucleic amplification test instrument, with 151 Mycobacterium species (4 MTC and 147 Non-tuberculosis Mycobacterium (NTM) type strains).

[Results] The specificity of TRCReady® MTB was 100%, however, TRCReady® MAC misidentified a total of six NTMs, M. arosiense, M. chimaera, M. colombiense, M. marseillense, M. vulneris and M. yongonense, as M. intracellulare. Then, the specificity for TRCReady® MAC was 96.0% (145/151).

[Discussion] TRCReady® MTB and TRCReady® MAC are highly specific for identifying MTC, M. avium and M. intracellulare. Six NTM species which have been rarely isolated in Japan showed false-positive results as M. intracellulare. However, when a sample was identified as M. intracellulare, the phenotypic characteristics like colony morphology would be carefully examined.

Key words: TRCReady, M. tuberculosis complex, M. avium, M. intracellulare, Mycobacterium species identification

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結論

高度医療と高齢化社会に伴い，肺アスペルギルス症は結核後遺症の一型から常在的な肺変性疾患の一型に変遷しつつある。外科治療に最も難解する複雑型肺アスペルギルス症に対しては，抗真菌薬を併用しながら，結核外科手技を応用した空洞直達手術などを考慮すべきである。

文献

1）中島由操：抗酸菌症の治療における外科の役割と展望—外科治療は今後も有効か再考 1991；66：911–915。

8. おわりに

わが国では1950年代後半から1960年代にかけて肺結核の外科治療，特に肺切除が最も盛んに行われたが，今日の肺瘍を中心とする呼吸器外科治療手技の大半は，過去の結核に対する外科治療にその基を発していること，およびこの報告をお読みいただいてご理解いただけたであろうか。最初の2題は呼吸器外科OBの先生方にによる報告であり，歴史的なことを含めわかりやすくご説明いただいた。次の4題は現役で活躍しておられる先生方の，主として自験例の詳細な分析を通じての検討である。各先生方はこれらの炎症性疾患および胸膜疾患の外科治療に関して，当該疾患を熟知したうえでそれぞれ原則にのっとって問題を解決するために外科治療を選択されておられる。現在の一般呼吸器外科医にとっては，炎症性疾患および胸膜疾患について熟知することは難しい点があるとは思われるが，呼吸器内科医師などと十分協議して適応を決める，種々の術式を選択して外科治療に臨んでいただきたいと願っている。

著者のCOI（conflicts of interest）開示：本論文発表内容に関して特になし。

LEGACIES OF SURGERY FOR TUBERCULOSIS AND SUCCESSION TO THE NEXT GENERATION

Abstract A symposium entitled "Legacies of surgery for tuberculosis and succession to the next generation" was held at the 89th annual meeting of The Japanese Society for Tuberculosis in Gifu. The purpose of the symposium was to look back at the history of surgery for tuberculosis and development of surgical techniques. The contribution of those techniques to the next generation was also discussed. Many unique and universal techniques such as segmentectomy, thoracoplasty, muscle flap plombage, greater omental plombage, open window thoracotomy, cavernostomy, and decortication have matured during a long history. Based on the development of anti-tuberculous drugs, surgery seems to have a less important role. However, surgical techniques are still required for multi-drug resistant tuberculosis and non-tuberculous mycobacteriosis. Core techniques are applied in the surgery for many thoracic diseases, such as lung cancer, mycosis, pyothorax, and mesothelioma. This manuscript summarizes the presentations.

Key words: Surgical treatment, Tuberculosis, Non-tuberculous mycobacteriosis, Micosis, Pyothorax, Air-way stenosis

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TREATMENT OF LATENT TUBERCULOSIS INFECTION WITH A COMBINATION OF ISONIAZID AND RIFAMPICIN

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Abstract [Purpose] To conduct a literature review on clinical studies and national guidelines in various countries, for the purposes of facilitating discussion regarding whether latent tuberculosis infection (LTBI) treatment regimens composed of isoniazid and rifampicin should be introduced in Japan.

[Methods] For clinical studies, 23 non-randomized studies and 10 randomized studies in the literature were reviewed.

[Results] In patients who had received treatments composed of isoniazid and rifampicin ([HR]; largely 3 months), compared with those who had received isoniazid monotherapy ([H]; largely 6 to 9 months), both frequency and severity of liver dysfunction tended to be reduced, but adverse drug effects increased in general. Treatment completion rate tended to be higher in those who had received HR than in those who had received H. Preventive effects of HR seemed to be at least equivalent, or somewhat superior, to H. Many national guidelines of the European Union and other countries reviewed in this study recommended HR as an LTBI treatment regimen, and generally provided a high level of evidence.

[Conclusion] 3HR treatment has been well studied in many clinical and randomized studies, and seems to have garnered a high level of merit in order to be introduced as one of the LTBI treatment regimens in Japan.

Key words: Tuberculosis, Latent tuberculosis infection, Isoniazid, Rifampicin, Guideline

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