

# Kopsu- ja kopsuvälise tuberkuloosi käsitus

Tõendusmaterjali kokkuvõte

## Kliiniline küsimus nr 14

**Kas kopsuvälise tuberkuloosi ravi järgselt tuleb kõiki patsiente võimaliku retsidiivi õigeaegseks diagnoosimiseks jälgida vs mitte jälgida?**

Tulemusnäitajad: elulemus/suremus, haiguse retsidiveerumine, patsiendi rahulolu

## Kokkuvõte, sh kriitiliste tulemusnäitajate kaupa

### Kokkuvõte tõendusmaterjali kvaliteedist

Soovituse koostamiseks vaadati läbi 17 ravijuhendit. Teemakohast infot sisaldus neist ühes. Lisainformatsiooni saamiseks teostati otsing PubMedi andmebaasist, kust süstemaatilisi ülevaateid ega läbilõikelisi uuringuid ei leitud.

### Kokkuvõte tõendusmaterjalist

Kopsuvälise tuberkuloosi eduka ravi järgselt ei ole patsientide ravijärgne jälgimine vajalik.

## Kokkuvõte ravijuhenditest

### 1. PHAC 2014

Lümfisõlmetuberkuloosi korral võivad pärast ravi lõppu lümfisõlmed suurenedada või uuesti tekkida, ehkki see on reeglina mööduv. See ei pruugi tähendada retsidiivi, ehkki selle võimaluse hindamiseks võib kaaluda korduvat lümfisõlme peennõelaspirtsiooni koos mükobakterioloogilise külviga.

Luu- ja liigesetuberkuloosi 6-kuulise raviga on retsidiivi tõenäosus 1,35%; 6-12-kuulise raviga 0,86% ja enam kui 12-kuulise ravi korral 0,5%. Ravi ebaõnnestumise tõenäosus on suurem, kui haiguse ulatus on ravi alustamisel suurem ja kui tegu on sklerootilise luuhaaratusesega. Luu- ja liigesetuberkuloosi korral on tervistumise definitsioon keeruline; rutiinselt mükobakteriaalse kasvu puudumise näitamiseks külve ei võeta.

Teiste kopsuvälise tuberkuloosi vormide kohta ravijuhendis infot ei ole.

## Viited

PHAC	2014
The chemotherapy of tuberculous lymphadenopathy, the commonest form of extra-pulmonary tuberculosis, is reviewed and a recommendation	Donald PR. The chemotherapy of

<p>made for the treatment of this condition in children. <b>Fifteen papers</b> were identified recording the treatment and follow-up <b>of 1133 adults and children</b> with six-month isoniazid and rifampicin based regimens. <b>In 32 (2.8%) cases treatment was recommenced, but in only one case was relapse microbiologically confirmed and in a further four histology was compatible with tuberculosis.</b> Four studies enrolling 484 adults and children, record the follow-up of patients receiving 6-18 months treatment with INH and RMP based regimens; treatment was recommenced in 24 (5%), but in no case was relapse confirmed microbiologically. Five papers describe the treatment and follow-up of 246 adults and children receiving nine-month INH and RMP based regimens and record the recommencement of treatment in 4 (1.6%) cases, but in no case was relapse confirmed microbiologically. Four controlled studies failed to show any advantage for treatment regimens longer than six months. <b>Paradoxical recurrence and worsening of clinical features was common during and following all regimens being recorded in from 3 to 20% of patients. Very seldom were these events accompanied by evidence of culture of Mycobacterium tuberculosis to confirm microbiological failure to respond or relapse.</b> Tuberculous lymphadenopathy in children can be safely treated with six months of INH and RMP with PZA given for the first two months and accompanied by EMB in areas with a high prevalence of drug resistance. <b>Every effort should be made to confirm the diagnosis and possible relapses microbiologically.</b></p>	<p>tuberculous lymphadenopathy in children. Tuberculosis (Edinb). 2010 Jul;90(4):213-24.</p>
<p>Ei artikli teesides ega täistekstis ei ole andmeid, millele ravijuhend antud artikli kontekstis viitab – nimelt luu-liigesetuberkuloosi retsidiivide määri sõltuvalt ravi kestusest.</p>	<p>Choi JA, Koh SH, Hong SH, Koh YH, Choi JY, Kang HS. Rheumatoid arthritis and tuberculous arthritis: differentiating MRI features. AJR Am J Roentgenol 2009;193(5):1347-53.</p>

### Viide kasutatud ravijuhendile

<p>1. Public Health Agency of Canada (2014). Canadian Tuberculosis Standards, 7th Edition.</p>	<p>PHAC 2014</p>
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## Üksikuuringud

Kokkuvõte	Viide kirjandusallikale
<p><b>PURPOSE:</b> /.../ For <b>extrapulmonary tuberculosis</b>, treatment duration depends on tuberculosis involvement and HIV status. The objective of this study was to describe the main characteristics of a cohort of extrapulmonary tuberculosis patients, to compare patients with a 6-month treatment to those with more than a 6-month treatment, and to analyze the compliance of medical centres with recommended duration of treatment.</p> <p><b>METHODS:</b> A <b>retrospective cohort study</b> of 210 patients with extrapulmonary tuberculosis was carried from January 1999 to December 2006 in two hospitals in the north-east of Paris. These patients were treated with quadruple therapy during two months, followed by dual therapy during 4 months (n=77) or more (n=66). The characteristics of each group were compared by uni- and multivariate analysis. The primary endpoint was the rate of relapse or treatment failure at 24-month follow-up after treatment completion.</p> <p><b>RESULTS:</b> <b>No relapse was observed</b> after 24 months of follow-up after the end of treatment in the two groups. /.../</p>	<p>Bouchikh S, Stirnemann J, Prendki V, et al. [Treatment duration of extra-pulmonary tuberculosis: 6 months or more? TB-INFO database analysis]. [Article in French] Rev Med Interne. 2012 Dec;33(12):665-71.</p>
<p>A <b>retrospective case-series</b> was carried out of all cases diagnosed and treated as <b>extrapulmonary tuberculosis</b> during 1991 through to 2000 at King Faisal Specialist Hospital and Research Centre (KFSH and RC), Riyadh, Kingdom of Saudi Arabia. Demographic, clinical, laboratory, and outcome data were abstracted from medical records.</p> <p>Among 298 patients with follow up data, 10 (<b>3.4%</b>) <b>had documented relapse and 50 (16%) died</b>. Death was related to tuberculosis in 24 (48%) patients.</p>	<p>Bukhary ZA, Alrajhi AA. Extrapulmonary tuberculosis, clinical presentation and outcome. Saudi Med J. 2004 Jul;25(7):881-5.</p>
<p><b>METHODS:</b> <b>Retrospective, observational analysis</b> to evaluate the effectiveness of a 6-month treatment regimen (2HRZE/4H3R3) for all patients <b>diagnosed with EPTB</b> in Caracas, Venezuela, from 1 January 1998 to 31 December 2000, using direct observation.</p> <p><b>RESULTS:</b> Of 679 patients enrolled, 101 (14.9%) had AIDS. In 83.2% the diagnosis was based on microbiological, histological or genetic amplification information. Of 612 (90.1%) patients who took more than 90% of the doses, treatment had to be altered in</p>	<p>Caminero JA, Fuentes ZM, Martín TY, et al. A 6-month regimen for EPTB with intermittent treatment in the continuation phase: a study of 679 cases. Int J Tuberc Lung Dis. 2005 Aug;9(8):890-5.</p>

<p>six (1%) due to drug side effects. Of the remaining 606 patients who took more than 90% of the doses, 603 (99.5%) were cured and three failed. <b>In the follow-up conducted 2 years after the end of treatment, only 6 relapsed (1%).</b> Cures without relapse were achieved in 24 cases of central nervous system involvement, 27 cases of osteoarticular involvement and in the 42 who had miliary and/or disseminated TB. /.../</p> <p>Analysis 2 years after completion of treatment identified six of 606 (1%) patients who had once again been diagnosed with EPTB and were considered relapses. These cases were: <b>2 pleural TB, 1 genitourinary TB, 1 lymph node TB, 1 ear nose-throat TB, and 1 ocular TB.</b> Another 6 had died due to causes unrelated to TB. It should be noted that all 24 cases of central nervous system (CNS) TB, 27 osteoarticular TB and 42 miliary TB who took over 90% of the prescribed doses were cured, with no relapses reported to NTP after 2 years. In the final analysis of all 679 patients included in the study, only 3 were failures (0.44%) and 10 <b>(1.47%). were relapses</b>—4 in the defaulter group and 6 among the previously cured cases.</p>	
<p><b>Genitourinary tuberculosis (GUTB)</b> usually results from the reactivation of old, dormant tuberculous diseases by pathogens of the mycobacteriumtuberculosis complex. GUTB is the second most common form of extrapulmonary tuberculosis. /.../ <b>After antituberculous treatment of GUTB, surveillance with regular follow-up visits over the next five years is recommended.</b> /.../</p> <p>Ülevaateartiklis järelkontrolli põhjendamise aluseks olevate artiklite viited puuduvad.</p>	<p>Zajaczkowski T. Genitourinary tuberculosis: historical and basic science review: past and present. Cent European J Urol. 2012;65(4):182-7.</p>
<p>/.../ After antituberculous treatment of <b>genitourinary tuberculosis a follow-up surveillance over 5 years is recommended.</b> /.../</p> <p>Ülevaateartikkel, järelkontrolli pikkus artiklitega toetamata.</p>	<p>Lenk S. [Genitourinary tuberculosis in Germany: diagnosis and treatment]. [Article in German] Urologe A. 2011 Dec;50(12):1619-27.</p>
<p><b>METHODS:</b> We conducted a <b>retrospective study</b> in the Department of infectious diseases and internal medicine in the Amiens Teaching Hospital, France. All patients diagnosed with <b>lymph node tuberculosis</b> between 1998 and 2007 were included; some patients presented with bi- or multifocal tuberculosis. The aim of the study was a practice analysis.</p>	<p>Lanoix JP, Douadi Y, Borel A et al. [Lymph node tuberculosis treatment: from recommendations to practice]. [Article in</p>

<p>RESULTS: We studied 48 medical records, 16 were excluded for lack of more than 40% of data or because lymph node tuberculosis was non-active. The mean age of the <b>32 patients included</b> was 49 years. The mean duration of treatment was 10.9 months (standard deviation 2.6, median 11, range 6-18). /.../ <b>One relapse was diagnosed</b>, eight patients (25%) were lost to follow-up at 1 year after treatment.</p>	<p>French] Med Mal Infect. 2011 Feb;41(2):87-91.</p>
<p>The treatment results of <b>mycobacterial cervical lymphadenitis</b> in 69 patients between 1990 and 1993 are reviewed. /.../ <b>The cure rate was 100% after a minimum follow-up of 3 years.</b></p>	<p>Kanlikama M, Gökcalp A. Management of mycobacterial cervical lymphadenitis. World J Surg. 1997 Jun;21(5):516-9.</p>
<p>OBJECTIVE: To establish whether a 6-month treatment regimen for <b>tuberculous meningitis</b> is equally as effective as longer treatment.</p> <p>METHOD: <b>Medline search</b> for papers published between 1978 and 1999.</p> <p>RESULTS: <b>Relapse occurred in two out of 131 (1.5%) G6 and in 0 out of 591 G&gt;6 patients.</b></p>	<p>van Loenhout-Rooyackers JH, Keyser A, Laheij RJ, Verbeek AL, van der Meer JW. Tuberculous meningitis: is a 6-month treatment regimen sufficient? Int J Tuberc Lung Dis. 2001 Nov;5(11):1028-35.</p>
<p>PURPOSE: To evaluate the long-term outcome (up to 7 years) of <b>presumed ocular tuberculosis</b> (TB) when the therapeutic decision was based on WHO guidelines.</p> <p>METHODS: Twelve out of 654 new uveitic patients (1998-2004) presented with choroiditis and positive tuberculosis skin test (TST) (skin lesion diameter &gt;15 mm).</p> <p>RESULTS: <b>Two relapses out of 10 confirmed ocular TB was observed after complete lesion healing, 2.5 years and 4.5 years after therapy, respectively.</b></p> <p>CONCLUSIONS: Our long-term follow-up of chorioretinal lesions demonstrated relapse of ocular tuberculosis in 10% of patients with confirmed ocular TB, despite complete initial retinal scarring.</p>	<p>Ducommun MA, Eperon S, Khonkarly MB et al. Long-term close follow-up of chorioretinal lesions in presumed ocular tuberculosis. Eur J Ophthalmol. 2012 Mar-Apr;22(2):195-202.</p>
<p>Thirty-five patients fulfilled the diagnostic criteria for presumed <b>tuberculous uveitis</b> and were included in the study. /.../ Anti-tuberculous therapy resulted in a highly significant increase in visual acuity, from 0.53 to 0.78 (<math>P &lt; 0.001</math>), a highly significant</p>	<p>Cimino L, Herbort CP, Aldigeri R, et al. Tuberculous uveitis, a resurgent and</p>

<p>decrease of recurrences, from 100 to 10% (<math>P &lt; 0.001</math>), <b>with only three recurrences observed during the follow-up, /.../.</b></p>	<p>underdiagnosed disease. Int Ophthalmol. 2009 Apr;29(2):67-74.</p>
<p><b>OBJECTIVES:</b> To study imaging changes associated with spinal tuberculosis (ST) over time and evaluate their association with clinical and laboratory data.</p> <p><b>CONCLUSIONS:</b> Significant imaging abnormalities can persist after successful treatment of ST. <b>These findings suggest that MRI need not be repeated in patients with clinical and laboratory improvement.</b></p>	<p>Le Page L, Feydy A, Rillardon L, et al. Spinal tuberculosis: a longitudinal study with clinical, laboratory, and imaging outcomes. Semin Arthritis Rheum. 2006 Oct;36(2):124-9. Epub 2006 Jul 13.</p>
<p><b>OBJECTIVES:</b> /.../ The involvement of the <b>shoulder joint</b> is infrequent. We report our experience treating tuberculosis of the shoulder in 11 patients.</p> <p><b>RESULTS:</b> The mean follow-up period after the end of treatment was 28.72 months (range, 22-52 months). <b>At the time of the last visit, all the lesions had healed without recurrence.</b></p>	<p>Kapukaya A, Subasi M, Bukte Y et al. Tuberculosis of the shoulder joint. Joint Bone Spine. 2006 Mar;73(2):177-81.</p>
<p>We conducted a <b>multicenter retrospective study</b> in the Paris urban area, France, in 206 cases of <b>osteoarticular tuberculosis</b> documented by examination of a local specimen. This article reports our findings in the 143 patients who were followed up at least until treatment completion.</p> <p><b>RESULTS:</b> Mean follow-up after treatment completion was 16 months. Seventy-five (52%) patients had spondylitis and 68 (48%) did not. The number of antituberculous agents used during the initial treatment phase was four in 65% of cases and three in 35%. In the <b>spondylitis</b> subgroup, mean (+/- SD) antibiotic therapy duration was 14.7 +/- 3.4 months, and 25% of patients required surgery; <b>3% of patients died, 1% suffered a relapse, and 96% achieved a full recovery with no relapse.</b> In the <b>nonspondylitis</b> subgroup, mean antibiotic therapy duration was 13 +/- 3 months and 29% of patients required surgery. The only HIV-positive patient had osteitis of the calcaneus with a <b>relapse</b> that led to discovery of secondary rifampin resistance.</p>	<p>Pertuiset E, Beaudreuil J, Horowitzky A et al. Nonsurgical treatment of osteoarticular tuberculosis. A retrospective study in 143 adults. Rev Rhum Engl Ed. 1999 Jan;66(1):24-8.</p>

## **Medinfootsing**

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