

Chemotherapy

Document Number PD2005_071

Publication date 25-Jan-2005

Functional Sub group Clinical/ Patient Services - Infectious diseases

Summary All chemotherapeutic regimens for TB in NSW should be given in accordance with the National Health and Medical Research Council guidelines.

Author Branch Communicable Diseases

Branch contact 9391 9234

Applies to Area Health Services/Chief Executive Governed Statutory Health Corporation, Board Governed Statutory Health Corporations, Affiliated Health Organisations, Community Health Centres, Dental Schools and Clinics, Divisions of General Practice, Government Medical Officers, NSW Ambulance Service, NSW Dept of Health, Private Hospitals and Day Procedure Centres, Private Nursing Homes, Public Health Units, Public Hospitals

Distributed to Public Health System, Community Health Centres, Dental Schools and Clinics, Divisions of General Practice, Government Medical Officers, Health Associations Unions, Health Professional Associations and Related Organisations, NSW Ambulance Service, NSW Department of Health, Public Health Units, Public Hospitals, Private Hospitals and Day Procedure Centres, Private Nursing Homes, Tertiary Education Institutes

Review date 25-Jan-2010

File No. A19764/1

Previous reference 94/92

Issue date 16-Sep-1994

Status Active

Director-General

Compliance with this policy directive is mandatory.

CIRCULAR

File No	A19764/1
Circular No	94/92
Issued	16 September 1994
Contact	Meg Winks (02) 9646 8576

CHEMOTHERAPY

All chemotherapeutic regimens for TB in NSW should be given in accordance with the National Health and Medical Research Council guidelines.

Effective multidrug anti-TB therapy should be initiated promptly, based on clinical (high index of suspicion or confirmation) and drug resistance surveillance data.

If drug resistance is suspected, cases should be treated as drug resistant until proven otherwise. Drug resistance should be suspected with a history of previous chemotherapy, especially if inadequately supervised or documented, or place of birth in Asia, Africa or Latin America.

Drug regimens of at least six months duration are recommended for both smear negative and smear positive patients. In any case therapy must be long enough to fulfil the requirements of the given regimen. Pyrazinamide must be included in the first two months of any six month regimen.

Chemotherapy must be fully supervised, with a three times weekly regimen, for all pulmonary and extrapulmonary cases. Full supervision requires the actual observation of drug ingestion and a written record of drug administration (patient and clinic held).

The reasons for supervision are to detect:

- **R**reaction to the anti-TB drugs
- **R**esistance due to non compliance or inadequate or inappropriate therapy.
- **R**eactivation due to non compliance or inadequate or inappropriate therapy.

as soon as possible and take appropriate and instant action

Distributed in accordance with circular list(s):

A 79 B C 86 D E 29
F 44 G 39 H 34 I 31 J 84
K L 34 M 27 N 29 P 23 Q

73 Miller Street North Sydney NSW 2060
Locked Mail Bag 961 North Sydney NSW 2059
Telephone (02) 9391 9000 Facsimile (02) 9391 9101

The patient must be **directly observed** taking the medication either at home, school, work place or clinic.

If the patient is attending the clinic for supervised chemotherapy and does not attend, then they must be visited at home.

Medication charts must be written up and signed by the medical officer. The Chest Clinic nurse must sign and date the medication form immediately following the administration of chemotherapy.

Patients who have had at least six months of supervised chemotherapy for TB should **not** be routinely followed for longer than two years after treatment is completed. They should be given a copy of their latest chest x-ray and advised about TB symptoms and urged to seek medical care immediately if symptoms appear.

The progress of sputum smear positive patients on chemotherapy must be monitored by sputum examination at regular intervals until the sputum is smear negative.

Active TB in HIV seropositive and other immunocompromised people should be treated with conventional medications but for three months longer than for other patients, or a minimum of six months after sputum cultures become negative. Follow up of HIV-AIDS patients should continue indefinitely.

ANTI-TUBERCULOSIS THERAPY FOR ADULTS AND HIV NEGATIVE PERSONS

Table I. - First line drugs in tuberculosis					
Drug	Daily Dose		3 doses per week		Common adverse events
	mg/kg	max	mg/kg	max	
Isoniazid	5-10	300	15	750	Hepatitis
Rifampicin	10	600	10	600	Hepatitis
Streptomycin	15	1000	15	1000	VIII Nerve toxicity
Pyrazinamide	30	2000	50	2500	Hyperuricaemia
Ethambutol	15-25	1200	30-40	2000	Ocular toxicity

Table II. - Chemotherapy for pulmonary tuberculosis			
Bacteriology culture	Initial therapy and duration (months)	Maintenance therapy and duration (months)	Minimum duration (months)
Positive with fully sensitive AFB	EHRZ (2)	HR (4)	6
Negative	EHRZ for full duration		6
Positive; AFB resistant to H and/or S	EHRZ for full duration		6
Positive ; AFB resistant to R	Treat with at least three drugs to which AFB is sensitive. Choose from second line drugs. Short course regimens not appropriate.		18
Abbreviations: E = ethambutol; H = isoniazid; R = rifampicin; Z = pyrazinamide; AFB = acid-fast bacilli			

**ANTI-TUBERCULOSIS THERAPY FOR ADULTS AND
HIV NEGATIVE PERSONS**

Table III. - Regimen combinations for different sites *.			
Disease site	Initial phase and duration (months)	Continuation phase and duration (months)	Minimum duration (months)
Pulmonary	EHRZ (2)	HR (4)	6
Lymph Node	EHRZ (2)	HR (10)	12
Bone	EHRZ (2)	HR (7)	9
Genito-urinary	EHRZ (2)	HR (4)	6
Skin	EHRZ (2)	HR (4)	6
Miliary (without intracranial disease)	EHRZ (2)	HR (4)	6
Meningeal or intracerebral (with or without miliary)	EHRZ (6)	HRZ (12)	18
Immunocompromised patient (incl. HIV)	EHRZ (2)	HR (7)	9

Abbreviations: E = ethambutol; H = isoniazid; R = rifampicin; Z = pyrazinamide; AFB = acid-fast bacilli

* Applicable for positive bacteriology with fully sensitive organisms