

1. Record Nr.	UNINA9910633933103321
Titolo	Tropical diseases in China : schistosomiasis // editor : Xiao-nong Zhou
Pubbl/distr/stampa	Singapore : , : Springer : , : PMPH, People's Medical Publishing House, , [2022] ©2022
ISBN	9789811957079 9789811957062
Descrizione fisica	1 online resource (268 pages)
Collana	Public Health in China ; ; Volume 5
Disciplina	614.553
Soggetti	Schistosomiasis - China Tropical medicine Tropical medicine - China
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Preface -- Contents -- Contributors -- 1: History of Schistosomiasis Japonica in China -- 1.1 Discovery of Schistosomiasis in China -- 1.2 History of the National Schistosomiasis Control Programme in China -- 1.3 Epidemiological Features of Schistosomiasis in Different Endemic Regions in China -- 1.3.1 Lake and Marshland Regions -- 1.3.2 Plain Regions with Waterway Networks -- 1.3.3 Hilly and Mountainous Regions -- 1.4 Burden and Impact of Schistosomiasis -- 1.4.1 Individual Impact -- 1.4.2 Burden of Disease -- References -- 2: Endemicity, Diagnosis and Treatment of Schistosomiasis in China -- 2.1 Diagnosis and Treatment of Acute Schistosomiasis -- 2.1.1 Epidemic Features of Acute Schistosomiasis -- 2.1.2 Symptomatology -- 2.1.3 Detection of Acute Schistosomiasis -- 2.1.4 Diagnostic Criteria -- 2.1.5 Treatment -- 2.1.6 Case Study -- 2.2 Diagnosis and Treatment of Chronic Schistosomiasis -- 2.2.1 Symptomatology -- 2.2.2 Detection of Chronic Schistosomiasis -- 2.2.3 Diagnostic Criteria -- 2.2.4 Treatment -- 2.3 Diagnosis and Treatment of Advanced Schistosomiasis -- 2.3.1 Clinical Subtypes -- 2.3.2 Clinical Features -- 2.3.3 Diagnostic Approach -- 2.3.4 Diagnostic Criteria -- 2.3.5

Treatment -- 2.3.6 Case Study -- References -- 3: Biology and Control of Oncomelania Snail in China -- 3.1 Biology of Oncomelania Snail -- 3.1.1 Taxonomic Category -- 3.1.2 Morphology -- 3.1.3 Ecology -- 3.2 Distribution and Survey of *O. hupensis* in China -- 3.2.1 Distribution Characteristics -- 3.2.2 Factors Influencing Snail Distribution -- 3.2.3 Snail Detection -- 3.2.4 Snail Monitoring and Surveillance -- 3.2.5 Detection of Infected Snails -- 3.3 Control of Oncomelania *hupensis* -- 3.3.1 General Concept for Snail Control -- 3.3.2 Physical Control of Oncomelania -- 3.3.3 Chemical Control of Oncomelania.

3.3.4 Biological Control of Oncomelania -- References -- 4: Progress on Schistosomiasis Research in China -- 4.1 Research Advances on Diagnostics -- 4.1.1 Historical Review of Diagnostic Tools in China -- Parasitological Approaches -- Stool Examination -- Tissue Biopsy -- Imaging Techniques -- Immunological Tests -- The Intradermal Test (ID) -- The Circumoval Precipitin Test (COPT) -- The Indirect Hemagglutination Assay (IHA) -- The Enzyme-Linked Immunosorbent Assay (ELISA) -- Rapid Diagnostic Kits -- Techniques Based on Molecular Biotechnology -- 4.1.2 Diagnostic Applications in the National Schistosomiasis Control Programme -- The Morbidity Control Stage -- The Infection Control Stage -- The Transmission Control Stage -- The Stage of Transmission Interruption and Elimination -- 4.1.3 Quality Control -- 4.1.4 Current Challenges -- 4.2 Advances in Treatment -- 4.2.1 Praziquantel: A Milestone in Schistosomicidal Treatment -- Mechanisms of Action of PZQ -- Enantioseparation and Schistosomicidal Efficacy of PZQ -- Formulation and Route of Administration for PZQ -- Lipid-Based Delivery Systems -- Transdermal Delivery of PZQ -- Injectve Administration of PZQ -- Rectal Administration of PZQ -- Sustained-Release PZQ Tablet -- Film-Coated PZQ Tablets -- Evolution of Chemotherapy Model Based on PZQ in China -- Introduction Stage -- Clinical Use Stage -- Chemertherapy Stage -- Mass Chemertherapy Stage -- Selective Chemotherapy Stage -- Human and Animal Synchronous Chemotherapy Stage -- 4.2.2 Artemisinin: A Novel Prevention Drug for *S. Japonicum* -- Artemether -- Artemether Monotherapy -- Artemether-PZQ Combination -- Recommended Treatment Regimen and Contraindications -- Artesunate -- Artesunate Monotherapy -- Artesunate-PZQ Combination Therapy -- Recommended Treatment Option -- Concluding Remarks on Artemisinin.

4.3 Advances in Molluscicides Application -- 4.3.1 Chemical Molluscicides -- Sodium Pentachlorophenate -- Niclosamide -- Rongbao and Rongya -- META-Li -- Other Chemical Molluscicides -- 4.3.2 Plant-Derived Molluscicides -- Saponins -- Alkaloids -- Flavonoids -- 4.3.3 New Types of Molluscidal Compounds -- Plant-Derived Molluscicide -- (Chloroacetyl) Catechol -- *Buddleja Lindleyana* -- 4.3.4 Conclusion -- 4.4 Surveillance and Early Warning -- 4.4.1 Surveillance System -- Coverage -- Intensity -- Standardization -- Case Definition -- Data Collection -- Data Processing and Management -- Analysis and Interpretation -- Dissemination -- Evaluation -- Schistosomiasis Surveillance Systems in China -- 4.4.2 Early Warning System -- Basic Conception -- Conception and Classification -- Definitions and Features of Early Warning Indicators -- The Definition, Characteristics, and Component Framework of an Early Warning Mechanism -- Prediction Methods -- Qualitative Prediction -- Quantitative Prediction -- Integrated Prediction Method -- 4.4.3 Application of Prediction and Early Warning Methods in Schistosomiasis -- Prediction of Transmission Status of Schistosomiasis *Japonica* at Province and County Level -- Predication of Snail-Infested Areas Based

on Ecological Model -- Prediction of Potential Transmission Areas of Schistosomiasis Japonica under the Scenarios of Environmental Changes -- 4.5 Applicable Technology -- 4.5.1 Applicable Technology for Infection Source Control -- 4.5.2 Applicable Technology for Snail Control -- A Machine for Snail Control Integrating Mechanized Vegetation Cleaning and Automatic Mollusciciding -- A Rapid Niclosamide Detector -- A Snail Control Approach Covering by Black Plastic Film -- 4.5.3 Applicable Technology for Detection and Monitoring *S. japonicum* Infections.

An Intelligent Detector for *S. japonicum*-Infested Water Using Sentinel Mice -- A Kit to Detect *S. japonicum* DNA of Oncomelanid Snails -- Internet+ and Google Earth-Based Surveillance and Response System -- 4.5.4 Applicable Technology for Health Promotion -- References --

5: China's Experiences in the Combat of Schistosomiasis -- 5.1 Evolution of Schistosomiasis Control Strategies in China -- 5.1.1 Introduction -- 5.1.2 Schistosomiasis Control Strategies in China -- Preparation Stage (1950-1955) -- Preparation for Future Large-Scale Control Programmes -- Achievements and Lessons Learnt -- Mass-Campaign Stage Focused on Snail Control (1956-1985) -- Snail Control Strategy -- Achievements and Lessons Learnt -- Morbidity Control Stage Boosted by International Cooperation (1986-2003) -- Morbidity Control Strategy -- Achievements and Lessons -- Integrated Strategy to Block Schistosomiasis Transmission (2004-Present) -- Comprehensive Strategy of Blocking Schistosomiasis Transmission -- Achievements and Lessons Learnt -- 5.1.3 Conclusion -- 5.2 Development of Water Conservancy Projects for the Control of *S. japonicum* in China -- 5.2.1 Introduction -- 5.2.2 The Concept of Schistosomiasis Control Through Water Conservancy -- 5.2.3 The Guiding Principle of Schistosomiasis Control Through Water Conservancy -- 5.2.4 Building Water Resource Projects for Schistosomiasis Control: Current Approaches -- Measures Taken by Water Conservancy Engineering Facilities to Prevent Snail Diffusion or Barriers Erected to Prevent People and Livestock from Entering Snail Habitats -- Preventing the Spread of Oncomelanid Snails Through the Use of a Blocking Net -- The Settling Basin for *O. hupensis* -- Removing the Middle Layer of Water Without *O. hupensis* -- Building a Platform for *O. hupensis* Control.

Building an Isolation Ditch for Preventing People and Livestock from Entering Snail Habitats -- Measures of Water Conservancy Project Combined with Snail Habitat Modification for Snail Control -- The Soil or Sand Burying Method for Snail Control -- Soil Cement Hardening for Snail Control -- Falling the Bottomland or Elevating the Bottomland -- 5.2.5 Water Conservancy Cases in the Endemic Areas of China -- Snail Control and Flood Control Engineering on the Fu River, Yangxin County, Hubei Province, China -- Snail Control Project for Removing the Middle Layer of Water in the West Sluice in Junshan District, Hunan Province, China -- Snail Control Engineering of the Wangjiatai Sluice in Yingcheng City, Hubei Province, China -- 5.2.6 Project Management and Evaluation After Completion -- Assessment of Design and Operation Management of Water Conservancy Combined with Schistosomiasis Prevention -- Assessment of the Effects of Water Conservancy for Snail Control -- 5.2.7 Conclusions and Perspectives --

5.3 Countermeasures for Controlling Schistosomiasis in Domestic Animals in China -- 5.3.1 The Epidemic Status and Impact of Domestic Animal Schistosomiasis in China -- The Epidemic Status of Domestic Animal Schistosomiasis in China -- Early Reports on Domestic Animal Schistosomiasis in China -- The Epidemic Status of Domestic Animal Schistosomiasis in China in the 1950s -- The Current Status

of Schistosomiasis in Domestic Animals in China -- The Harmful Effects of Domestic Animal Schistosomiasis in China -- The Susceptibility of Different Species of Domestic Animals to *S. japonicum* Infection in China -- The Role of Domestic Animals as Carriers in the Transmission of *S. japonicum* -- 5.3.2 Countermeasures for the Control of Schistosomiasis in Domestic Animals in China -- The Processes for Controlling Schistosomiasis in Domestic Animals in China.
Diagnosis of Domestic Animal Schistosomiasis.
