**INTRODUCTION**

**Review question / Objective:** The aim of this meta-analysis of randomized controlled trials is to evaluate the efficacy of Athletic Tape for Facial Paralysis.

**Condition being studied:** Bell's palsy is a kind of idiopathic acute peripheral facial palsy, it control the muscles of the facial expressions. Although is expected to have a full recovery rate of 70%, but there are still as much as 30% of patients with left could be disfiguring facial weakness, the symptoms of involuntary movement or continued crying. The most commonly used treatment option is cortical steroids and antiviral drugs. Kinesio Taping, combined with physical therapy, is a kind of safe and promising adjuvant therapy, used in the acute treatment of bell's palsy. However, need further large-scale randomized controlled study to evaluate these complementary intervention in patients with bell's palsy whether full recovery has significant additive or synergistic effect.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 04 October 2020 and was last updated on 04 October 2020 (registration number INPLASY2020100008).
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these complementary intervention in
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synergistic effect.

METHODS

Participant or population: The inclusion
criteria is accord with the standard of
clinical diagnosis of the Facial Paralysis of
adults.

Intervention: Athletic Tape was the main
intervention.

Comparator: Other treatments besides
athletic tape was the main intervention (e.g.
acupuncture, drugs and Physical therapy).

Study designs to be included: Randomized
controlled trials (RCTs) and controlled
clinical trials (CCTs) will be included.

Eligibility criteria: Interventions will include
any type of Kinesio taping for improvement
of symptoms of peripheral facial paralysis.

Information sources: We will search the
following electronic databases for relevant
trials from inception to present: China
National Knowledge Infrastructure(CNKI),
Wanfang Date, SinoMed, Technology
Periodical Database (VIP), PubMed,Embase, Web of Science and The
Cochrane Library.

Main outcome(s): The primary outcome will
be the total effective rate.

Additional outcome(s): Secondary
outcomes will include House-Brackmann
scale, Portmann score, facial nerve
conduction velocity (NCV), Facial Disability
Index (FDI), Facial Disability Index include
Facial Function score (FDIp) and social
Function score (FDIs).

Data management: Two authors will
independently extract data. Any
disagreement will be resolved by
discussion until consensus is reached or by
consulting a third author.

Quality assessment / Risk of bias analysis: The
risk of bias of included studies was
assessed by using an assessment tool, the
Cochrane Handbook for Systematic
Reviews of Interventions version 5.1.0
(updated in 2011 by the Cochrane
Organization) by 2 reviewers subjectively.
The assessment tool covers 7 domains:
random sequence generation (selection
bias), allocation concealment (selection
bias), blinding of participants and
personnel (performance bias), blinding of
outcome assessment (detection bias),
incomplete outcome data (attrition bias),
selective reporting (reporting bias), and
other biases. Bias were assessed as low
risk, high risk, or unclear risk. Discrepancies
were resolved through
discussion and settled by a third reviewer.

Strategy of data synthesis: The statistical
analyses software, Revman 5.3, was used
to conduct this meta-analysis.Differences
in mean, standard deviation, sample size,
with 95% confidence interval were
measured to compare the Kinesio taping
group with control group to investigate the
changes in Therapeutic efficiency,
Portmann scores, Facial Disability
Index (FDI). Statistical heterogeneity
between studies was tested using I²
statistics, which presented the percentage
of the total variability among the studies
that was caused by heterogeneity rather
than chance. The 2 test was used to assess
whether differences in results were
compatible with chance alone, a P-
value<0.1 was considered to indicate
significant heterogeneity. If P>0.1 and
I²<50%, statistical heterogeneity was
perceived to be acceptable and a fixed
effects model was used to conduct the
meta-analysis; otherwise, if P<0.1and
I² ≥ 50%, statistical heterogeneity was perceived to be relatively high and a random effects model was used to perform the meta-analysis.

Subgroup analysis: Subgroup analysis and sensitivity analysis were further conducted to explore the source of such heterogeneity. If P ≥ 0.1 studies with the same outcome were included, a funnel plot was used to assess publication bias of the included studies.

Sensibility analysis: The results of one or more outlier studies will conflict with other studies and may become a source of heterogeneity. In order to ensure the quality of Meta-analysis we will perform a sensitivity analysis to exclude outliers.

Language: Without any language or publication status restrictions.

Country(ies) involved: China.

Keywords: Kinesio taping, peripheral facial paralysis, meta-analysis, systematic review, protocol.

Dissemination plans: The results of this systematic review will be published in a peer-reviewed journal or presented at conferences.

Contributions of each author:
Author 1 - Zai-hui Sun - Author 1 drafted the manuscript.
Author 2 - Yan-ping Tian - The author provided statistical expertise.
Author 3 - Yan-fu Tan - The author contributed to the development of the selection criteria, and the risk of bias assessment strategy.
Author 4 - Dan Tao - The author contributed to the development of the selection criteria, and the risk of bias assessment strategy.
Author 5 - Wen-bo Li - The author acts as a supervisor.
Author 6 - Ji-lin Ding - The author contributed to the development of the selection criteria, and the risk of bias assessment strategy.

Author 7 - Shuang-chun Ai - The author read, provided feedback and approved the final manuscript.