Australian Hip Surveillance Guidelines for children with Cerebral Palsy 2014


Endorsed by: [Endorsement logos]

Winters, Gage and Hicks hemiplegia group IV (WGH IV)

WGH IV gait pattern clearly declares itself by 4-5 years of age. The child with a classification of WGH IV has the potential for late onset progressive hip displacement regardless of GMFCS level.

- Review at 5 years of age
  - Verify WGH and GMFCS
  - If WGH IV confirmed, ongoing hip surveillance according to confirmed GMFCS level
    - If WGH IV and MP stable, review 10 years of age
      - If MP is abnormal and/or unstable, continue 12 monthly surveillance until MP stability is established

GMFCS I

- Initial clinical assessment and antero-posterior (AP) pelvic radiograph at 12-24 months of age (or at identification if older than 24 months)
- Review at 3 years of age
  - Verify GMFCS level
    - If GMFCS I is confirmed, repeat clinical assessment. AP pelvic radiograph is NOT required
- Review at 5 years of age
  - Verify GMFCS level

GMFCS II

- Initial clinical assessment and AP pelvic radiograph at 12-24 months of age (or at identification if older than 24 months)
- Review 12 months later
  - Verify GMFCS level
    - If GMFCS II is confirmed, repeat clinical assessment and AP pelvic radiograph
    - If GMFCS level has changed, ongoing surveillance according to confirmed classification
  - If MP is abnormal and/or unstable, continue 12 monthly surveillance until stability is established
  - When MP is stable, review at 4-5 years of age

GMFCS III

- Initial clinical assessment and AP pelvic radiograph at 12-24 months of age
- Review 6 months later
  - Verify GMFCS level
    - If GMFCS III is confirmed, repeat clinical assessment and AP pelvic radiograph
    - If GMFCS level has changed, ongoing surveillance according to confirmed classification
  - If MP is abnormal and/or unstable, continue 6 monthly surveillance until MP stability is established
  - When MP is stable, reduce frequency to 12 monthly surveillance
  - Review at 7 years of age
    - Verify GMFCS level
    - If MP is stable, discharge from surveillance
  - If MP is abnormal and/or unstable, continue 12 monthly surveillance until stability is established

GMFCS IV

- Initial clinical assessment and AP pelvic radiograph at 12-24 months of age
- Review 6 months later
  - Verify GMFCS level
    - If GMFCS IV is confirmed, repeat clinical assessment and AP pelvic radiograph
    - If GMFCS level has changed, ongoing surveillance according to confirmed classification
  - If MP is abnormal and/or unstable, continue 6 monthly surveillance until MP stability is established
  - When MP is abnormal and/or unstable, continue 12 monthly surveillance until MP stability is established
  - Review at 7 years of age
    - Verify GMFCS level
  - If MP is stable, discharge from surveillance
    - If MP is abnormal and/or unstable, continue 12 monthly surveillance until skeletal maturity
  - If MP is stable, below 30%, and gross motor function is stable, AP pelvic radiographs may be discontinued until puberty
  - 12 monthly AP pelvic radiographs must resume prepuberty and continue until skeletal maturity

GMFCS V

- Initial clinical assessment and AP pelvic radiograph at 12-24 months of age
- Review 6 months later
  - Verify GMFCS level
    - If GMFCS V is confirmed, continue 6 monthly surveillance until 7 years of age or until MP stability is established
  - If GMFCS level has changed, ongoing surveillance according to confirmed classification
  - Review at 7 years of age
    - When MP is stable, reduce frequency of surveillance to 12 monthly
  - Review at 7 years of age
    - If MP is stable, below 30% and gross motor function is stable, surveillance may be discontinued until puberty
  - 12 monthly AP pelvic radiographs must resume prepuberty and continue until skeletal maturity

Group I
  - Independent of MP, when clinical and/or radiographic evidence of scoliosis or pelvic obliquity is present, 6 monthly surveillance is required until skeletal maturity
  - At skeletal maturity, if MP is abnormal and progressive scoliosis or significant pelvic obliquity is present continue 12 monthly surveillance

Group II
  - Independent of MP, when clinical and/or radiographic evidence of scoliosis or pelvic obliquity is present, 6 monthly surveillance is required until skeletal maturity
  - At skeletal maturity, if MP is abnormal and progressive scoliosis or significant pelvic obliquity is present, continue 12 monthly surveillance

Gait patterns in hemiplegia (Winters, Gage and Hicks, 1987)

Foot drop
True equinus/
adducted, internal rotation
Group I

Trans-equinus/
plantarflexion
Group III

Trans-equinus/
adducted, internal rotation
Group IV

Equinus/
adducted, internal rotation
Group II

Independent of MP, when clinical and/or radiographic evidence of scoliosis or pelvic obliquity is present, 6 monthly surveillance is required until skeletal maturity

At skeletal maturity, if MP is abnormal and progressive scoliosis or significant pelvic obliquity is present, continue 12 monthly surveillance