

Supplementary File 3: Primary chart for journals' articles

First author's name	Title	Date	Type of article	Source	Descriptive data
Aronsson <i>et al.</i>	DDH	1994	Journal/ multicenter study	PubMed	<p>DDH more accurately describes the condition previously termed CDH. The disorder is not always present at birth (congenital), and an infant may have a normal neonatal hip screening examination and subsequently develop a dysplastic or dislocated hip. Developmental dysplasia encompasses the wide spectrum of hip problems seen in infants and children. Physicians should understand that a normal neonatal screening examination does not assure normal hip development</p> <p>The acronym CDH is confusing and has been used synonymously with congenital dislocation or congenital disease of the hip. The word “developmental” invokes the dimension of time acknowledging that the dysplasia or dislocation may occur before or after birth. Dysplasia means an abnormality of development and encompasses a wide spectrum of hip problems</p> <p>Definitions</p> <p>DDH includes hips that are unstable, malformed, subluxated, or dislocated. Instability is the inability of the hip to resist an externally applied force without developing a subluxation or dislocation. A malformation includes any abnormality in the development of the femur and/or acetabulum. A subluxation is an incomplete dislocation with some residual contact between the femoral head and acetabulum, and a dislocation indicates complete displacement of the femoral head from the acetabulum. Previous authors have differentiated between a teratologic and typical dislocation of the hip. A teratologic dislocation occurs early <i>in utero</i> and is associated with other malformations such as chromosomal abnormalities and neuromuscular disorders. A typical dislocation occurs in an otherwise healthy infant and may occur <i>in utero</i>, at birth, or after birth</p>
American Academy of Pediatrics	Clinical practice guideline: Early detection of DDH. Committee on Quality Improvement, Subcommittee on DDH	2000	Journal/ guidelines	PubMed	<p>DDH is the preferred term to describe the condition in which the femoral head has an abnormal relationship to the acetabulum. DDH includes frank dislocation (luxation), partial dislocation (subluxation), instability wherein the femoral head comes in and out of the socket, and an array of radiographic abnormalities that reflect inadequate formation of the acetabulum. Because many of these findings may not be present at birth, the term developmental more accurately reflects the biologic features than does the term congenital. The disorder is uncommon</p> <p>The acronym DDH includes hips that are unstable, subluxated, dislocated (luxated), and/or have malformed acetabula. A hip is unstable when the tight fit between the femoral head and the acetabulum is lost, and the femoral head is able to move within (subluxated) or outside (dislocated) the confines of the acetabulum. A dislocation is a complete loss of contact of the femoral head with the acetabulum. Dislocations are divided into two types: teratologic and typical. Teratologic dislocations occur early in utero and often are associated with neuromuscular disorders, such as arthrogryposis and myelodysplasia, or with various dysmorphic syndromes. The typical dislocation occurs in an otherwise healthy infant and may occur prenatally or postnatally</p>

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Jackson <i>et al.</i>	Common questions about DDH	2014	Journal/ review	PubMed	DDH denotes an abnormality of the acetabulum or femoral head and their congruence that presents at birth or in infancy. It is more inclusive than the previous term "CDH" because it includes abnormalities other than overt dislocation Terminology used in describing DDH																		
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Mooney <i>et al.</i>	Developmental dislocation of the hip: A clinical overview	1995	Journal/ review	PubMed	<p>Historically, the term “CDH” has been used. Reports illustrating cases of late diagnosis of hip abnormalities in patients who previously have had normal clinical and/or radiographic examinations as well as recognition of the wide spectrum of abnormalities from dislocation to dysplasia have led the orthopedic and pediatric communities to adopt the term DDH. This term now is preferred</p> <p>Definitions and categorization</p> <p>Hip dislocation can be categorized as “typical” or “teratologic.” Teratologic dislocations are uncommon and usually are associated with neuromuscular abnormality, arthrogryposis, or myelomeningocele and typically are high, fixed dislocations. In contrast, “typical” DDH occurs in neurologically normal infants and encompasses a wide spectrum of deformity and presentation. It is important to recognize that previously stable hips may become unstable during infancy and repeated examinations are needed until the child is of walking age. The spectrum of typical DDH at birth includes</p> <p>Dislocated hip: These hips are dislocated in a resting position, and the dislocation is present at birth. This dislocation may be reducible or irreducible by provocative tests</p> <p>Located but unstable or dislocatable hip: These hips rest in a located position and are unstable or frankly dislocatable on clinical examination and provocative maneuvers. Hips can become either more unstable or may improve spontaneously during the early postnatal period</p> <p>Dysplastic hip: A shallow or dysplastic acetabulum may be present at birth. These hips may or may not be dislocatable or unstable but may develop more instability during development</p>
Nemeth <i>et al.</i>	DDH	2012	Journal/ review	PubMed	<p>Definition</p> <p>DDH encompasses the spectrum of hip abnormalities involving the relationship between the femoral head and the acetabulum during early growth and development. A hip may be dislocated at rest, dislocatable (but in a normal position at rest), subluxed (incomplete contact between the femoral head and acetabulum), subluxable (incomplete contact induced with provocative maneuvers), or appear normal on physical examination yet have an abnormally shaped acetabulum or femoral head radiographically. The previously used term “CHD” has been abandoned in recognition of this spectrum, acknowledging as well the fact that a child may have normal examination findings at birth but progress to dislocation later in life. Strictly speaking, the term DDH does not apply to abnormal development of the hip due to other diseases, such as cerebral palsy, Legg-Calvé-Perthes disease, or slipped capital femoral epiphysis, in which “hip dysplasia” is a sufficient term, nor does the term include traumatic dislocation. In addition, the term “teratologic dislocation” is reserved for cases of hip dislocation present at birth related to neurologic disease or joint contracture syndromes such as spina bifida, arthrogryposis, or Larsen syndrome</p>
Novacheck	DDH	1996	Journal/ review	PubMed	<p>The term DDH is necessarily general and encompasses the many facets of the condition. DDH is variable at presentation but is defined as an abnormal formation of the hip joint occurring between organogenesis and maturity as a result of instability. It is intentionally nonspecific to include the entire spectrum of the disorder. The author finds it helpful to think of DDH as a spectrum in both time and severity. In other words, the individual findings depend extensively on the age of the child. They also depend heavily on the severity of that child’s problem. This spectrum does not include hip abnormalities caused by other diseases, such as cerebral palsy or myelodysplasia</p>

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Storer <i>et al.</i>	DDH	2006	Journal/ review	PubMed	<p>DDH refers to a continuum of abnormalities in the immature hip that can range from subtle dysplasia to dislocation. The term DDH has replaced congenital dislocation of the hip because it more accurately reflects the full spectrum of abnormalities that affect the immature hip. DDH can predispose a child to premature degenerative changes and painful arthritis. Careful physical examination is recommended as a screening tool; early diagnosis helps improve treatment results and decrease the risk of complications</p> <p>Definitions</p> <p>Hip dysplasia refers to an abnormality in the size, shape, orientation, or organization of the femoral head, acetabulum, or both. Acetabular dysplasia is characterized by an immature, shallow acetabulum and can result in subluxation or dislocation of the femoral head. In a subluxed hip, the femoral head is displaced from its normal position but still makes contact with a portion of the acetabulum. With a dislocated hip, there is no contact between the articular surface of the femoral head and the acetabulum. An unstable hip is one that is reduced in the acetabulum but can be provoked to subluxate or dislocate. Teratologic hip dysplasia, which is outside the scope of this discussion, refers to the more severe, fixed dislocation that occurs prenatally, usually in those with genetic or neuromuscular disorders</p>
Yamamuro	CDH or DDH?	2005	Journal/ editorial	PubMed	<p>The author believes that, for several reasons, DDH is the more appropriate nomenclature. First, when assessing neonates, teratologic dislocation, a distinct clinical entity, must first be excluded. Second, the so-called CDH is not caused by a single gene, but by multiple genetic factors, as suggested by female dominance in incidence and familial occurrence. Multigenetic diseases such as osteoporosis and rheumatoid arthritis are not called congenital; likewise, this hip disorder should not be. This hip disorder not only can develop and even be exacerbated when certain environmental factors are present but can also recede without further intervention following elimination of those same factors at an early developmental stage. Multiple genetic factors are thought to be involved in the etiology of this hip disorder, but it is incorrect to use of the term "congenital" to call it. Its manifestation and progression are subject to perinatal environmental factors. DDH should thus be considered the more appropriate terminology</p>
Yang <i>et al.</i>	Developmental Dysplasia of the hip	2019	Journal/ review	PubMed	<p>DDH encompasses a broad spectrum of abnormal hip development during infancy and early development. The definition encompasses a wide range of severity, from mild acetabular dysplasia without hip dislocation to frank hip dislocation</p>
Kotlarsky <i>et al.</i>	DDH: What has changed in the last 20 years?	2015	Journal/ review	Europe PMC	<p>The term DDH describes the whole range of deformities involving the growing hip including frank dislocation, subluxation and instability, and dysplasia of the femoral head and acetabulum. This term replaced the previously accepted "CDH," which did not describe the developmental aspect of the disorder</p> <p>Dislocations are divided into two subtypes: dislocation that occurs in an otherwise healthy infant is called typical and it may occur pre- or post-natally. Dislocation that is associated with neuromuscular disorders is called teratologic and occurs prenatally</p>

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Noordin <i>et al.</i>	DDH	2010	Journal/ review	Europe PMC	<p>Terminology</p> <p>The term DDH has replaced congenital dislocation of the hip as it describes the full range of abnormalities affecting the immature hip more accurately. Some children may have a normal femoroacetabular relationship at birth and only later go on to develop a dysplastic hip</p> <p>Definition</p> <p>Any abnormality in the shape, size, and orientation of the femoral head, acetabulum, or both is referred to as hip dysplasia. It has been seen that the majority of abnormalities arise as a result of maldevelopment of the acetabulum. The femoral head is involved secondarily as a result of nonphysiological biomechanics from the anteverted acetabulum or as a result of treatment</p> <p>A hip is unstable when the tight fit between the femoral head and the acetabulum is lost and the femoral head is able to move within or outside the confines of the acetabulum. Subluxation of the hip refers to incomplete contact between the articular surfaces of the femoral head and acetabulum. A dislocated hip has no contact between the femoral head and acetabulum. A TDH shows very marked and advanced changes in the hip joint at the time of birth and is in a fixed dislocated position. There is an association with other severe malformations, such as spina bifida, arthrogryposis multiplex congenita, lumbosacral agenesis, chromosomal abnormalities, diastrophic dwarfism, Larsen syndrome, and other rare syndromes</p>
Vaquero-Picado <i>et al.</i>	DDH: Update of management	2019	Journal/ review	Europe PMC	<p>The term "DDH" includes a wide spectrum of hip alterations: neonatal instability, acetabular dysplasia, hip subluxation, and true dislocation of the hip. Classical terms such as "CDH" are used less often these days because they do not include the developmental aspect of the dysplasia, which is important from a medicolegal point of view. DDH alters hip biomechanics, overloading the articular cartilage and leading to early osteoarthritis. DDH is the main cause of total hip replacement in young people (about 21%-29%)</p>

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Guarniero	Dysplasia of hip development: Update	2015	Journal/ review	Google Scholar	<p>We have adopted the term “DDH” as a replacement for the previous name of “CHD,” and we propose to disseminate its use. This new nomenclature more precisely describes the spectrum of abnormalities possible for hip disorders among newborns. DDH is a generic term that describes a wide range of anatomical abnormalities of the hip, which may be congenital in nature or may develop during children’s first months of life. In reality, the term DDH describes the wide spectrum of abnormalities that affect growing hips, from dysplasia to joint dislocation, and going through the different degrees of coxofemoral subluxation. This new name has been endorsed by the AAOS, AAP, POSNA, EPOS, and SBOP</p> <p>Definitions</p> <p>Dysplasia of the hip is a term that denotes an abnormality of size, morphology, or anatomical orientation, in relation to the organization of either the femoral head or the acetabular cavity, or both. Acetabular dysplasia is characterized by an immature acetabulum, which may cause subluxation or luxation of the femoral head. In cases of subluxation of the hip, the femoral head is dislocated from its normal anatomical position but still maintains some contact with the acetabular cavity. In cases of luxation of the hip, there is no contact between the femoral head and the acetabular cavity. Hips are described as “unstable” when the joint is reduced, in the anatomical position, but when subluxation or luxation of the joint can be caused. Teratologic dislocation is produced during the first months of intrauterine life. At birth, not only can dislocation be recognized but also there are morphological abnormalities of such a degree that joint reduction will be very difficult, if not impossible. This category includes dislocations associated with arthrogryposis, Larsen syndrome, proximal femoral deficiency (with all its variants) and neuromuscular disorders, and dislocations that occur in genetic syndromes. In this group, the hips are almost always dislocated: Conditions of subluxation or instability do not exist and will not be discussed in this article</p>

TDH: Teratologic dislocation of the hip, AAOS: American Academy of Orthopedic Surgeons, AAP: American Academy of Pediatrics, POSNA: Pediatric Orthopedics Society of North America, EPOS: European Pediatric Orthopedics Society, SBOP: Brazilian Society of Pediatric Orthopedics, DDH: Developmental dysplasia of the hip, CDH: Congenital dysplasia of the hip, CHD: Congenital hip dislocation