Table 1. Frequency table of the main related intracranial compliance concepts observed in the literature.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Authors** | **Year** | **Type of study** | **Health Condition** | **Physiological definition** | | | **Clinical interpretation** | | | | **Anatomical localization** | | | | |
| ∆V/∆P | ∆P/∆V elastance | Pressure | Reserve capacity | Accommodation or compensation | Buffering ability | Not reported / Other | Intracranial compartment | Brain | Cerebrospinal space | Vessel | Not reported |
| Adams-Powers (1) | 1997 | Review | SAH |  | X |  |  | X |  |  | X |  |  |  |  |
| Alperin (2) | 2004 | Review | Not reported | X |  |  |  |  |  | X |  |  |  |  | X |
| Alperin et al. (3) | 2014 | CS | Chiari |  | X |  |  |  |  | X | X |  |  |  |  |
| Alperin et al. (4) | 2005 | CS | Chiari |  |  | X |  |  |  | X |  |  |  |  | X |
| Anile et al. (5) | 2010 | CS | NPH | X |  |  |  |  | X |  | X |  |  |  |  |
| Azevedo Filho et al (6) | 1979 | CS | Intracranial aneurysms |  | X |  |  |  |  | X | X |  |  |  |  |
| Bateman (7) | 2013 | Case report | Slit ventricle syndrome | X |  |  |  | X |  |  |  | X |  |  |  |
| Bateman et al. (8) | 2003 | CS | NPH | X |  |  |  |  |  | X |  |  |  | X |  |
| Behzadnia et al. (9) | 2018 | CS | TBI | X |  |  |  |  |  | X | X |  |  |  |  |
| Bentsen (10) | 2005 | Clinical trial protocol | SAH |  |  | X |  |  |  | X | X |  |  |  |  |
| Bentsen et al. (11) | 2008 | CS | SAH | X |  |  |  |  |  | X | X |  |  |  |  |
| Borgesen et al. (12) | 1979 | Experimental | NPH | X |  |  |  |  |  | X |  |  |  |  | X |
| Burchiel et al. (13) | 1981 | CS | TBI, SAH | X |  |  |  |  |  | X |  | X |  |  |  |
| De Simone et al. (14) | 2019 | Review | ICH | X |  |  |  | X |  |  |  | X |  |  |  |
| Dias et al. (15) | 2021 | CS | HC |  |  | X | X |  |  |  |  |  | X |  |  |
| Diringer (16) | 1993 | Review | SAH | X |  |  |  |  |  | X | X |  |  |  |  |
| Doyle-Mark (17) | 1992 | Review | Mixed | X |  |  |  | X |  |  | X |  |  |  |  |
| Eide (18) | 2005 | CS | Children (HC) |  | X |  |  |  |  | X |  |  |  |  | X |
| Eide et al. (19) | 2014 | CS | NPH and ICH |  | X |  | X |  |  |  | X |  |  |  |  |
| Eide et al. (20) | 2010 | CS | SAH |  | X |  | X |  |  |  | X |  |  |  |  |
| Eide et al. (21) | 2016 | Research report | ICH |  | X |  | X |  |  |  | X |  |  |  |  |
| Eide et al. (22) | 2020 | CS | NPH | X |  |  | X |  |  |  | X |  |  |  |  |
| Eide-Sorteberg (23) | 2006 | CS | SAH | X |  |  | X |  |  |  | X |  |  |  |  |
| Eide-Sorteberg (24) | 2007 | CS | SAH | X |  |  |  |  |  | X | X |  |  |  |  |
| Eide-Stanisic (25) | 2010 | CS | NPH |  | X |  | X |  |  |  | X |  |  |  |  |
| Elixmann et al. (26) | 2014 | CS | NPH | X |  |  |  | X |  |  | X |  |  |  |  |
| Foltz et al. (27) | 1990 | CS | HC | X |  |  |  | X |  |  | X |  |  |  |  |
| Foltz-Blanks (28) | 1988 | CS | HC | X |  |  |  | X |  |  | X |  |  |  |  |
| Fukuhara et al. (29) | 2001 | Experimental | HC |  | X |  | X |  | X |  |  | X |  |  |  |
| Germon (30) | 1994 | Review | Mixed |  | X |  |  |  |  | X |  | X |  |  |  |
| Germon (31) | 1988 | Review | Not reported | X |  |  |  |  |  | X | X |  |  |  |  |
| Gholampour-Fatouraee (32) | 2021 | Computational simulation | HC | X |  |  |  |  |  | X | X |  |  |  |  |
| González-Darder and Barcia-Salorio (33) | 1989 | Experimental | HC |  | X |  |  |  |  | X | X |  |  | X |  |
| Greitz (34) | 2004 | Review | HC | X |  |  |  |  | X |  |  |  |  |  | X |
| Heldt et al. (35) | 2019 | Review | TBI |  | X |  |  |  | X |  | X |  |  |  |  |
| Hickey et al. (36) | 2009 | CS | Mixed | X |  |  |  | X |  |  |  | X |  |  |  |
| Jacobsen et al. (37) | 2020 | CS | NPH |  |  | X | X |  |  |  | X |  |  |  |  |
| Jaeger-Layton (38) | 2000 | Overview | HC |  | X |  | X |  |  |  |  |  | X |  |  |
| Jha & Kochanek (39) | 2018 | Review | TBI | X |  |  |  |  |  | X | X |  |  |  |  |
| Johnson et al. (40) | 1999 | Experimental | HC | X |  |  | X |  |  |  |  | X |  |  |  |
| Kan et al. (41) | 2015 | CS | NPH |  | X |  |  |  | X |  | X |  |  |  |  |
| Kiening et al. (42) | 2003 | CS | TBI | X |  |  |  |  |  | X | X |  |  |  |  |
| Kim et al. (43) | 2012 | CS | TBI | X |  |  |  |  |  | X |  | X |  |  |  |
| Kim et al. (44) | 2009 | CS | NPH |  |  | X |  |  |  | X |  |  | X |  |  |
| Lai et al. (45) | 2016 | CS | Mixed | X |  |  |  | X |  |  | X |  |  |  |  |
| Lang et al. (46) | 2003 | Technical notes | TBI, SAH, ICH |  | X |  |  | X |  |  |  | X |  |  |  |
| Latka et al. (47) | 2007 | CS | Mixed |  | X |  |  |  |  | X |  |  | X |  |  |
| Lesniak et al. (48) | 2002 | CS | NPH | X |  |  |  |  |  | X | X |  |  |  |  |
| Lewis (49) | 1998 | Review | TBI | X |  |  |  | X |  |  | X |  |  |  |  |
| Lim et al. (50) | 1973 | Experimental | Aqueductal obstruction | X |  |  |  |  |  | X |  |  |  |  | X |
| Lindstrom et al. (51) | 2018 | CS | NPH |  | X |  | X |  |  |  | X |  |  |  |  |
| Lodi et al. (52) | 1998 | MM | Not reported |  |  | X |  |  |  | X | X |  |  |  |  |
| Lokossou et al. (53) | 2018 | CS | HC | X |  |  |  | X |  |  |  |  | X |  |  |
| March K (54) | 2000 | Review | TBI |  |  | X |  |  |  | X |  |  |  |  | X |
| Marshall et al. (55) | 2013 | Review | Not reported | X |  |  |  |  |  | X | X |  |  |  |  |
| Meier et al. (56) | 2002 | Experimental | HC |  |  | X |  |  |  | X |  |  | X |  |  |
| Meier et al. (57) | 1999 | MM | Not reported |  |  | X |  |  |  | X |  |  | X |  |  |
| Miyati et al. (58) | 2007 | CS | NPH | X |  |  |  |  |  | X | X |  |  |  |  |
| Morandi et al. (59) | 2006 | Medical hypotheses | HC | X |  |  |  |  |  | X |  |  |  |  | X |
| Mursch et al. (60) | 1995 | CS | TBI | X |  |  |  |  | X |  | X |  |  |  |  |
| Ng et al. (61) | 2005 | Pilot study | SAH | X |  |  |  |  |  | X | X |  |  |  |  |
| Nujaimin et al. (62) | 2009 | CS | TBI | X |  |  |  |  |  | X |  |  |  |  | X |
| Nyholm et al. (63) | 2017 | CS | TBI | X |  |  |  |  |  | X | X |  |  |  |  |
| Paraguassu et al. (64) | 2021 | CR | HC |  |  | X |  |  |  | X | X |  |  |  |  |
| Park et al. (65) | 2012 | CS | NPH |  | X |  |  |  |  | X |  | X |  |  |  |
| Park et al. (66) | 2010 | Experimental | HC |  | X |  |  |  |  | X |  | X |  |  |  |
| Piper et al. (67) | 1999 | CS | NPH | X |  |  |  |  |  | X | X |  |  |  |  |
| Portella et al. (68) | 2005 | CS | TBI | X |  |  |  |  | X |  | X |  |  |  |  |
| Qvarlander et al. (69) | 2013 | CS | NPH |  | X |  |  |  |  | X |  |  |  |  | X |
| Qvarlander et al. (70) | 2014 | MM | NPH |  | X |  |  | X |  |  |  |  | X |  |  |
| Raabe et al. (71) | 1999 | CS | HC, SAH, TBI | X |  |  |  |  | X |  | X |  |  |  |  |
| Rasulo et al. (72) | 2020 | CS | ICH |  |  | X |  |  |  | X | X |  |  |  |  |
| Robba et al. (73) | 2017 | Review | Mixed | X |  |  |  | X |  |  |  | X |  |  |  |
| Ross-Eynon (74) | 2005 | CS | Mixed |  | X |  |  |  |  | X |  | X |  |  |  |
| Saehle-Eide (75) | 2015 | CS | HC |  | X |  | X |  |  |  | X |  |  |  |  |
| Sahuquillo et al. (76) | 1991 | CS | NPH |  |  | X |  |  |  | X |  |  |  | X |  |
| Salci et al. (77) | 2004 | Experimental | TBI | X |  |  |  | X |  |  | X |  |  |  |  |
| Salci et al. (78) | 2006 | Experimental | TBI | X |  |  |  | X |  |  | X |  |  |  |  |
| Schaller-Graf (79) | 2005 | Review | Mixed | X |  |  | X |  |  |  | X |  |  |  |  |
| Schummer et al. (80) | 2003 | CS | Mixed | X |  |  |  | X |  |  | X |  |  |  |  |
| Smith et al. (81) | 2012 | Experimental | TBI | X |  |  |  |  |  | X | X |  |  |  |  |
| Solheim et al. (82) | 2008 | Case report | Seizure |  | X |  | X |  |  |  | X |  |  |  |  |
| Sonnabend et al. (83) | 2021 | MM | NPH | X |  |  |  |  |  | X |  |  |  | X |  |
| Sood et al. (84) | 2004 | CS | Shunt therapy | X |  |  |  |  |  | X |  |  |  |  | X |
| Tain & Alperin (85) | 2009 | MM | Not reported | X |  |  |  | X |  |  | X |  |  |  |  |
| Tain et al. (86) | 2011 | CS | ICH | X |  |  |  | X |  |  |  |  |  |  | X |
| Taylor (87) | 1994 | CS | Children (mixed) |  | X |  |  |  |  | X | X |  |  |  |  |
| Timofeev et al. (88) | 2008 | CS | TBI | X |  |  |  |  |  | X | X |  |  |  |  |
| Tisell et al. (89) | 2002 | CS | HC |  | X |  |  |  | X |  |  |  | X |  |  |
| Wagshul et al. (90) | 2011 | Review | Mixed | X |  |  |  |  |  | X |  |  |  |  | X |
| Wettervik et al. (91) | 2020 | CS | TBI | X |  |  |  |  |  | X | X |  |  |  |  |
| Wilkinson et al. (92) | 1979 | CS | Mixed |  | X |  |  |  |  | X |  | X |  |  |  |
| Wolf et al. (93) | 2021 | CS | Children (TBI) | X |  |  |  |  |  | X | X |  |  |  |  |
| Xu et al. (94) | 2021 | Experimental | HC | X |  |  |  | X |  |  | X |  |  |  |  |
| Yang et al. (95) | 1993 | Experimental | Acute hypoxia |  | X |  |  |  |  | X | X |  |  |  |  |
| Tirado-Caballero et al. (96) | 2021 | CS | Mixed |  | X |  |  |  |  | X |  |  |  |  | X |
| Shapiro et al. (97) | 1980 | CS | Mixed | X |  |  |  |  |  | X |  |  |  |  | X |
| Lodi et al. (98) | 1997 | MM | Mixed | X |  |  | X |  |  |  |  |  | X |  |  |
| Qiu et al. (99) | 2010 | MM | Mixed | X |  |  | X |  |  |  | X |  |  |  |  |
| Ursino et al. (100) | 1998 | MM | Mixed | X |  |  | X |  |  |  | X |  |  |  |  |
| Portella et al. (101) | 2002 | CS | TBI | X |  |  |  | X |  |  | X |  |  |  |  |
| Ursino et al. (102) | 2000 | MM | TBI | X |  |  | X |  |  |  | X |  |  |  |  |
| Kazimierska et al. (103) | 2021 | CS | NPH | X |  |  |  |  | X |  |  |  | X |  |  |

Abbreviations: ∆P, delta pressure; ∆V, delta volume; CS, clinical study; HC, hydrocephalus; ICH, intracranial hypertension; Mixed, more than two neurological conditions; MM, mathematical model; NPH, normal pressure hydrocephalus; SAH, subarachnoid hemorrhage; TBI, traumatic brain injury.

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