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Inventó junto a [Rudi Schulte](#) en 1973, la primera [válvula ajustable](#) de forma comercial para pacientes con hidrocefalia.

Esta válvula se encuentra todavía en uso, y se utiliza principalmente en combinación con una derivación existente en pacientes que reciben quimioterapia intraventricular.

La válvula tiene un simple bloqueo mecánico que se cierra mediante la aplicación de presión externa con un solo dedo. En una serie retrospectiva de 15 pacientes con un total de 16 implantes entre 2003 y 2010 se obtuvo una alta incidencia de oclusiones accidentales debido a que el mecanismo funciona siempre y cuando no hay presión externa que comprima la válvula. Sin embargo, las posiciones de la cabeza representan riesgos significativos para las oclusiones no intencionales. Por lo que hay que hacer hincapié en la importancia de: (1) una posición cerca de la línea media evitando la zona retroauricular o regiones occipitales, (2) un entrenamiento del manejo para las enfermeras y los médicos, (3) la instrucción a pacientes y familiares, y (4) la retirada del dispositivo tras el tratamiento citostático intratecal (Hertle y col., 2010).

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