The volume of an intraventricular hemorrhage (IVH) is an important prognostic factor and is commonly estimated through imaging (usually CT). There are different ways to estimate it, depending on the clinical setting and purpose (research, prognostication, treatment planning). Here's an overview:

 1. Estimation Methods A. ABC/2 Method (simplified estimation) While primarily used for intracerebral hemorrhage (ICH), the ABC/2 method can be adapted for IVH if the blood is well-circumscribed:

A = Greatest diameter (cm)

B = Diameter perpendicular to A (cm)

C = Number of slices with blood × slice thickness (cm)

Volume = (A × B × C) / 2

➡ Limitation: Works best for ellipsoid shapes. Blood in ventricles often irregular → less accurate.

B. Semi-automated or Manual Segmentation In clinical research or advanced centers, CT volumetry software (e.g., 3D Slicer, Analyze, OsiriX) is used.

Manual segmentation of blood-filled areas slice by slice provides most accurate estimation.

 2. Clinical Grading Systems A. Graeb Score Grades IVH semi-quantitatively by estimating the amount of blood in each ventricle.

Score 0–12, based on lateral, third, and fourth ventricles.

Modified Graeb Score improves granularity (score up to 32).

B. IVH Score in the ICH Score Presence of IVH contributes 1 point in the ICH score, a clinical grading scale for prognosis.

 Example: Typical Volumes Small IVH: <5 mL

Moderate IVH: 5–20 mL

Large IVH: >20 mL

IVH volumes >15–20 mL are associated with higher mortality and worse functional outcome, especially if associated with hydrocephalus.