**Absorbable Monofilament Suture Materials**

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| Suture  | Material | Qualities | Advantages | Disadvantages |
| Polydioxanone (PDS II) Image result for pds suture | Homopolymer of paradioxanone | SyntheticHydrolysed into natural metabolitesAcceptable to use for abdominal or thoracic wall closure or in the bladder tissue of sterile or infected canine urine. Rarely associated with calcinosis circumscripta in young dogs | Less tissue dragDo not potentiate infectionPersists longer in tissues High breaking strength  | BrittleTendency to break at knots |
| Polyglyconate (Maxon)Image result for Polyglyconate (Maxon) | Copolymer of trimethylene carbonate and glycolide | Synthetic Degrades via hydrolysisUsed in general soft tissue approximation and/or ligation, and in peripheral vascular surgery.  | Less tissue drag Do not potentiate infection Persists longer in tissues high breaking strength | Less breaking strengthGreater stiffnessInferior mechanical forceCompared to PDSMore rapid absorption pattern  |
| Poliglecaprone 25 (Monocryl)Image result for Poliglecaprone 25 (Monocryl) | Segmented block copolymer of caprolactone and glycolide | Synthetic Degraded by hydrolysisRecommended for ligation or tissue approximation during general soft tissue, oral and urinary bladder surgery, and for subcutaneous closures.1 Not recommended for use in cardiovascular, neurologic, microvascular or ophthalmic surgery | Better handling characteristics than other monofilament absorbable suturesHigh initial tensile strength Increased pliabilityGood knot securityMinimal tissue drag | Rapidly absorbedMaintains initial tensile strength for up to 2 weeks |
| Glycomer 631 (Biosyn)Image result for Glycomer 631 (Biosyn) | Polyester of 60% glycolide,14% doxanonen and 26% trimethylene carbonate | Synthetic Used in general soft tissue approximation, subcuticular skin closure and/or ligation including use in ophthalmic surgery. | Less tissue reaction than braided sutureMore rapid absorption patternSuperior strength at implantation  | More rapid absorption pattern |