



Nagoya City University Academic Repository

学位の種類	博士（医学）
報告番号	甲第1394号
学位記番号	第999号
氏名	永井 圭一
授与年月日	平成 25 年 12 月 27 日
学位論文の題名	<p>Preoperative selective transcatheter arterial embolization with a 2-French or thinner microcatheter including the triaxial system for hypervascular bone and soft tissue tumours (Triaxial system を含む 2Fr. 以下の細径マイクロカテーテルを用いた骨軟部腫瘍に対する術前動脈塞栓術の検討)</p> <p>Biomedical Imaging and Intervention Journal in press</p>
論文審査担当者	主査： 大塚 隆信 副査： 三島 晃, 芝本 雄太

Preoperative selective transcatheter arterial embolisation with a 2-French or thinner microcatheter including the triaxial system for hypervascular bone and soft tissue tumours

ABSTRACT

Surgery for hypervascular bone and soft tissue tumours is often complicated by massive intraoperative blood loss (IBL). Preoperative transcatheter arterial embolisation (TAE) has been used to reduce IBL and make surgery easier in patients with hypervascular primary or secondary bone tumours. Preoperative transcatheter arterial embolisation (TAE) is used to reduce intraoperative blood loss (IBL) from hypervascular bone and soft tissue tumours, but conventional catheters cannot be inserted into small or tortuous arteries. Recently, 2-Fr. or thinner-tip microcatheters, and a 1.9-Fr. no-taper microcatheter that can be inserted into a 2.7-Fr. microcatheter (named the triaxial system) have become available. The aim of this study was to evaluate the usefulness of preoperative TAE with these microcatheters. Fourteen patients underwent the procedure. All TAE was performed with gelatin sponge using a microcatheter: 2.0-Fr. microcatheter in 7, 1.8-Fr. microcatheter in 2, and the triaxial system in 5. We defined technical success as decrease in tumour stain by 75% or more at follow-up angiography, and clinical success as IBL < 1500 ml in cases undergoing surgery within 3 days after TAE and < 3000 ml in cases operated 4 or more

days later. The devascularisation rate could be decreased by > 75% at follow-up angiography in all cases (technical success rate, 100%). The median IBL was 573.5 ml (range, 219-3800 ml). The amount of IBL was < 1500 ml in 13 of the 14 cases, and in only one case, the IBL was 3800 ml (clinical success rate, 93%). Selective preoperative TAE with a thinner microcatheter including the triaxial system appears to be useful to decrease IBL.