

Table 1. Literature review of case reports of *Streptococcus intermedius* septic emboli to the brain

Lead Author (year)	Age (yrs.) / Sex	CNS Imaging	Oral Source	Cardiac Defect	S. <i>intermedius</i> . Blood Culture (+)	CNS ID Method	Regimen* (initial [intermediate] / final)	Abx Duration (wks)	Outcome
Herskovitz (2022) [this case report]	34 / M	Diffuse ring-enhancing lesions, T9-T10 spinal cord abscess	Yes	Yes (PFO)	No	Cell-free DNA next-generation sequencing	CRO, VAN, MTZ, ACV [TMP-SMX, IPM] / FEP, MTZ	11	Survived (complete recovery)
Gupta (2022) ⁹	43 / F	1 ring-enhancing lesion (temporal lobe), edema	No (IUD associated)	NR	NR	culture	CRO, VAN, MTZ / CRO	7	Survived
Hauser (2022) ¹⁰	26 / M	14 supratentorial and right cerebellar ring-enhancing lesions	No	No	No	16S rRNA	CRO, VAN, MTZ / CRO	32	Survived (complete recovery)
Hirose (2022) ¹¹	36 / M	T12-L12 ring-enhancing intramedullary lesion	No	Yes (right superior vena cava - left atrial shunt)	No	CSF culture	MEM, VAN / AMP	6	Survived (complete recovery)
Oleinikov (2022) ¹²	11 / F	Posterior fossa empyema with hydrocephalus	Yes	NR	No	culture	MEM, VAN [MEM, LZD] / LZD	12	Survived
Tkacz (2022) ⁶	6 / M	Thickened mucosa of sphenoid sinus; no brain abscess	No	NR	Yes	CSF culture	CRO, VAN / CRO	2	Survived (complete recovery)
Verma (2021) ¹³	68 / M	1 ring-enhancing lesion (medulla), edema	Yes	No	No	culture	NR / CRO, MTZ	18	Survived (complete recovery)
Fransson (2021) ¹⁴	34 / M	multiple ring-enhancing lesions, ventriculitis, edema	Yes	No	No	16S rRNA	MEM, VAN, ACV [MEM, VAN, MTZ +/- TMP-SMX +/- RIF] / MEM, VAN, MTZ	6	Survived (partial recovery)
Mintz (2021) ¹⁵	12 / F	1 ring-enhancing lesion (frontal parasagittal)	NR	NR	NR	culture	CRO, MTZ	4	Survived (complete recovery)
Shibata (2021) ¹⁶	62 / M	1 ring-enhancing lesion (frontal lobe)	Yes (periodontitis)	No	No	culture	MEM, VAN / CRO	NR	Deceased (due to cancer comorbidity)
	68 / M	2 ring-enhancing lesions, edema	Yes	No	No	culture	MEM	NR	Deceased (due to cancer comorbidity)
Yuen (2021) ¹⁷	65 / F	1 ring-enhancing brain lesion (frontal lobe)	Yes	NR	NR	culture	NR	6	Survived (partial recovery)
Gao (2020) ¹⁸	55 / M	1 ring-enhancing lesion (peri-ventricular) + edema	No	No (Pulmonary AV fistula)	No	CSF metagenomic next-generation sequencing	CRO, VAN [MTZ] / PEN G	9	Survived (complete recovery)
Kudo-Kubo (2020) ¹⁹	1.25 / F	3 ring-enhancing lesions (parietal, occipital lobes)	No	Yes (transposition of great vessels, VSD)	No	culture	MEM, VAN / PEN G	16	Survived
Diaz (2019) ²⁰	27 / M	1 peripherally enhancing lesion (left front lobe mass), edema, uncal herniation	Probable	No (Pulmonary AV malformations)	No	culture	CRO	8	Survived
Issa (2019) ²¹	12 / NR	left holoencephalic hypodensity (CT)	No (sinusitis)	NR	NR	culture + whole-genome sequencing of isolate	CRO	NR	Survived (complete recovery)
Al Moussawi (2018) ²²	56 / F	1 ring-enhancing lesion + edema	Yes (recent tooth extraction)	NR	NR	culture	CRO, VAN, MTZ	NR	Survived (complete recovery)
Viviano (2018) ²³	28 / M	2 ring-enhancing brain lesions (occipital and parietal lobes)	Yes	Yes (PFO)	No	culture	CRO, VAN, MTZ / CLI, AMC	15	Survived
Khaja (2017) ²⁴	72 / F	ring-enhancing lesion (left temporal lobe) + edema	No	NR	NR	culture	CRO, AMP, VAN / SAM	5	Survived (complete recovery)
Nayfe (2017) ²⁵	53 / F	1 ring-enhancing lesion (right thalamus), edema, herniation	NR	NR	NR	culture	NR	NR	NR
Tsuang (2017) ²⁶	68 / F	1 ring-enhanced cystic lesion (thalamus), edema	NR	NR	No	16s rRNA	CRO, MTZ / CRO	8	Survived (complete recovery)
Basyuni (2015) ²⁷	53 / M	1 peripherally enhancing lesion (right internal capsule, thalamus, midbrain), edema, mass effect	Yes	NR	No	culture	CRO, MTZ / MEM	NR	Deceased

Yakut (2015) ²⁸	10 / M	right-sided mastoiditis and right cerebellar abscess	No (mastoiditis)	No	No	Cerebellar drainage and VITEK mass spectrometry	TZP, VAN / MEM, VAN	6	Survived (complete recovery)
Trabue (2013) ²⁹	36 / M	2 ring-enhancing lesions (parieto-occipital cortex)	Yes	NR	NR	culture	NR	NR	NR
Hanna (2013) ⁴	46 / M	2 ring-enhancing lesions (fronto-parietal, parietal), edema	No	No	Yes	culture	NR / CRO, MRO	6	Survived (partial recovery)
Saito (2012) ³⁰	70 / F	Diffuse ring-enhancing brain lesions	NR	NR	No	16S rRNA	MEM, VAN [CRO, Amp] / LVX	12	Survived (complete recovery)
Esposito (2011) ³¹	3 / F	1 hypodense lesion (parietal lobe) + edema	No	NR	No	culture	CRO / CRO, MTZ	NR	Survived
Lee (2011) ⁵	47 / F	1 ring-enhancing lesion (left frontal lobe)	NR	Yes (left superior vena cava - left atrial shunt)	Yes	culture	PEN G, MTZ / ETP	8	Survived (complete recovery)
Malyiyil (2011) ³²	21 / M	3 ring-enhancing lesions (frontal, occipital lobes)	No	No	Yes	culture	CRO, VAN / ETP	12	Survived (complete recovery)
Herskovitz (2009) ³³	22 / M	13 ring-enhancing lesions	Yes (tongue piercing)	NR	No	culture	PEN / PEN, CHL	5	Deceased
Jan (2009) ³⁴	47 / M	15-20 diffuse ring-enhancing lesions	Yes	Yes (PFO)	No	culture	NR	NR	Survived (complete recovery)
Syros (2009) ³⁵	20 / M	1 ring-enhancing brain lesion (left parietal lobe)	No	Yes (PFO)	No	culture	CRO, MTZ	6	Survived (complete recovery)
Petti (2008) ³⁶	6 / M	diffuse ring-enhancing lesions	Yes (dental caries)	Yes (Ebstein anomaly, PFO)	No	16S rRNA	CRO, VAN / MEM	13	Survived (partial recovery)
	16 / M	diffuse ring-enhancing lesions	No	No	No	No (tracheal 16S rRNA)	CRO, VAN, ACV [CRO, VAN, MTZ] / CRO, RIF	16	Survived (partial recovery)
	21 / M	diffuse ring-enhancing lesions, hydrocephalus	No (sinusitis)	NR	No	16S rRNA	CRO, VAN, MTZ [+ AMB] / Gram (+) directed therapy	6	Survived (complete recovery)
Tran (2008) ⁷	16 / F	1 ring-enhancing brain lesion (frontal lobe)	No (sinusitis)	NR	Yes	culture & 16S rRNA	CRO, MTZ / CRO	8	Survived
Pompucci (2007) ³⁷	65 / F	brain and spinal subdural empyema	NR	NR	No	empyema culture	RIF, VAN / AMP	8	Survived (complete recovery)
Wagner (2006) ⁸	39 / ?	2 abscesses (frontal, temporal lobes and pons)	Yes (periodontitis)	No	Yes	culture	CRO, MTZ / PEN G, MTZ	NR	Survived (complete recovery)
Khatib (2000) ³⁸	55 / M	bilateral ring-enhancing lesions	No (lobar pneumonia)	NR	No	Autopsy	CRO, AMP	NR	Deceased
Yamamoto (1999) ³⁹	12 / M	1 frontal lobe mass extending to ethmoid and frontal sinuses	No (sinusitis)	NR	No	culture	aspoxicillin, MOX / PIP, CMZ	4	Survived (complete recovery)
	52 / M	1 ring-enhancing brain lesion (frontal lobe) + edema	NR	NR	No	culture	cefotiam / panipenem	5	Survived (complete recovery)