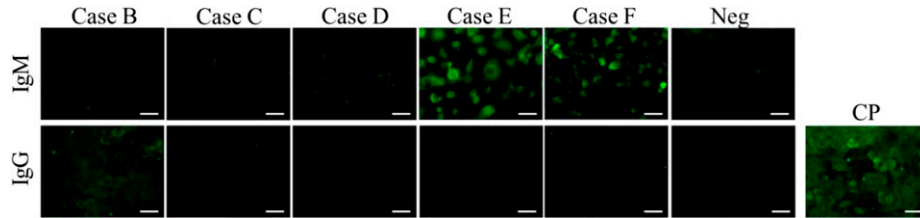


SUPPLEMENTAL METHODS

Generation of polyclonal antibody against severe fever with thrombocytopenia syndrome virus nucleoprotein. The nucleoprotein (NP) open reading frame was amplified by reverse transcriptase polymerase chain reaction with the primers NPFor: 5' CGCGAATTC(*EcoR*I)ATGTCAGAGTGGTCCAGGAT 3' and NPRev: 5' CGCAAGCTT(*Hind*III)TTACAGGTTCTGTAAGCAGC 3', and then sequenced and cloned into the plasmid pET-28a using the restriction endonuclease sites *EcoR*I and *Hind*III to generate the recombinant plasmid pET-28a-severe fever with thrombocytopenia syndrome virus nucleoprotein (SFTSV NP). The plasmid was transformed into competent *E. coli* BL21 cells. SDS-PAGE was performed to detect the prokaryotic expression of SFTSV NP. The protein was purified by affinity chromatography using cOmplete His-Tag Purification Resin according to the manufacturer's instructions (Roche, Mannheim, Germany) and mixed with Freund's adjuvants (Sigma, St. Louis, MO). The rabbit was inoculated with the protein-adjuvant mixture three times, 2 weeks apart. Sera were harvested and diluted for immunofluorescence assay analyses.



SUPPLEMENTAL FIGURE 1. Immunofluorescence analysis of IgM and IgG antibodies in the sera samples from each case in the cluster. Neg, the negative control using serum from a healthy donor as the primary antibody; CP, the positive control using serum from a SFTS patient in the convalescent phase as the primary antibody; bars, 100 μ m.

SUPPLEMENTAL TABLE 1
Primers used for the nested PCR detection of S, M, and L segments of SFTSV

Primers	Sequences(5'-3')	Nt positions
S segment		
SF	GGCTCCRCGCATCTTCACATT	1,139-1,159
SR	CATCATTGTCTTTGCCCTGACT	1,514-1,535
SFn	CCCCYGCAGTTGGAATTAGG	1,231-1,250
SRn	CAGGGTCHAAGAGGTTGATGG	1,450-1,470
M segment		
MF	AGCGAGGARAGTGCCCGTAC	2,449-2,468
MR	AAGCCAGCTTYGTCCTYGATC	3,219-3,239
MFn	CGTACCATAAAAAAAGATGGGTG	2,464-2,486
MRn	CTCAGCCCATTGCCAAACAAG	3,099-3,119
L segment		
LF	TTGGCGTWATTGTAGTCTCGTC	516-535
LR	AATGATGTTTGCTTGTTGCTCCT	968-990
LFn	CAGGATGAGGCAGAGGAGCT	569-588
LRn	TTGAGGGTCTTGGTGTGAAGT	807-828

Nt = nucleotide; SFTSV = severe fever with thrombocytopenia syndrome virus.

SUPPLEMENTAL TABLE 2
Routine blood tests and serum biochemistry of symptomatic patients during hospital days

Patients Days post onset	Case A			Case B						Case C				Normal range, adult
	7	8		7	8	9	10	6	7	8	9	10	13	
Routine blood tests														
WBC ($\times 10^9/L$)	1.83 ↓	5.63		3.19 ↓	3.41 ↓	5.9	5.67	4.51	5.02	7.4	5.3	N/A	N/A	3.5–9.5
NEUT ($\times 10^9/L$)	0.96 ↓	2.71		0.5 ↓	2.64	3.89	3.65	0.3 ↓	3.95	5.32	3.59	N/A	N/A	1.8–6.3
LYMPH ($\times 10^9/L$)	2.06	2.05		2.51	0.54 ↓	1.34	1.45	3.32↑	0.83 ↓	1.44	1.08 ↓	N/A	N/A	1.1–3.2
MONO ($\times 10^9/L$)	0.59	1.55 ↑		0.59	0.23	0.62 ↑	0.53	0.94 ↑	0.23	0.62 ↑	0.58	N/A	N/A	0.1–0.6
EO ($\times 10^9/L$)	0 ↓	0.01 ↓		0.08	0 ↓	0 ↓	0 ↓	0.24	0.01 ↓	0.01 ↓	0.04	N/A	N/A	0.02–0.52
PLT ($\times 10^9/L$)	6 ↓	19 ↓		21 ↓	40 ↓	57 ↓	33 ↓	46 ↓	71 ↓	108 ↓	94 ↓	N/A	N/A	125–350
Serum biochemistry														
ALT (U/L)	N/A	1,018 ↑		157 ↑	110 ↑	125 ↑	290 ↑	25	19	N/A	17	N/A	28	0–40.0
AST (U/L)	N/A	2,090 ↑		210 ↑	352 ↑	612 ↑	1,847 ↑	43 ↑	34	N/A	25	N/A	26	0–37.0
CK (U/L)	N/A	15,268 ↑		N/A	N/A	N/A	9,912 ↑	N/A	N/A	N/A	74	N/A	36	30–170
LDH (U/L)	N/A	4,602 ↑		N/A	1,288 ↑	N/A	4,309 ↑	N/A	248 ↑	N/A	189	N/A	192	90–245

ALT = alanine aminotransferase; AST = aspartate aminotransferase; CK = creatine kinase; EO = eosinophil count; LDH = lactate dehydrogenase; LYMPH = lymphocyte count; MONO = monocyte count; NEUT = neutrophil count; PLT = platelet count; WBC = white blood cells; N/A = not applicable. Clinical parameters below the normal range are shown in bold numbers with down arrows and those over the normal range are shown in bold with up arrows.