

AF 33/011
110594 80 AKU X2500 24

Fig. 1

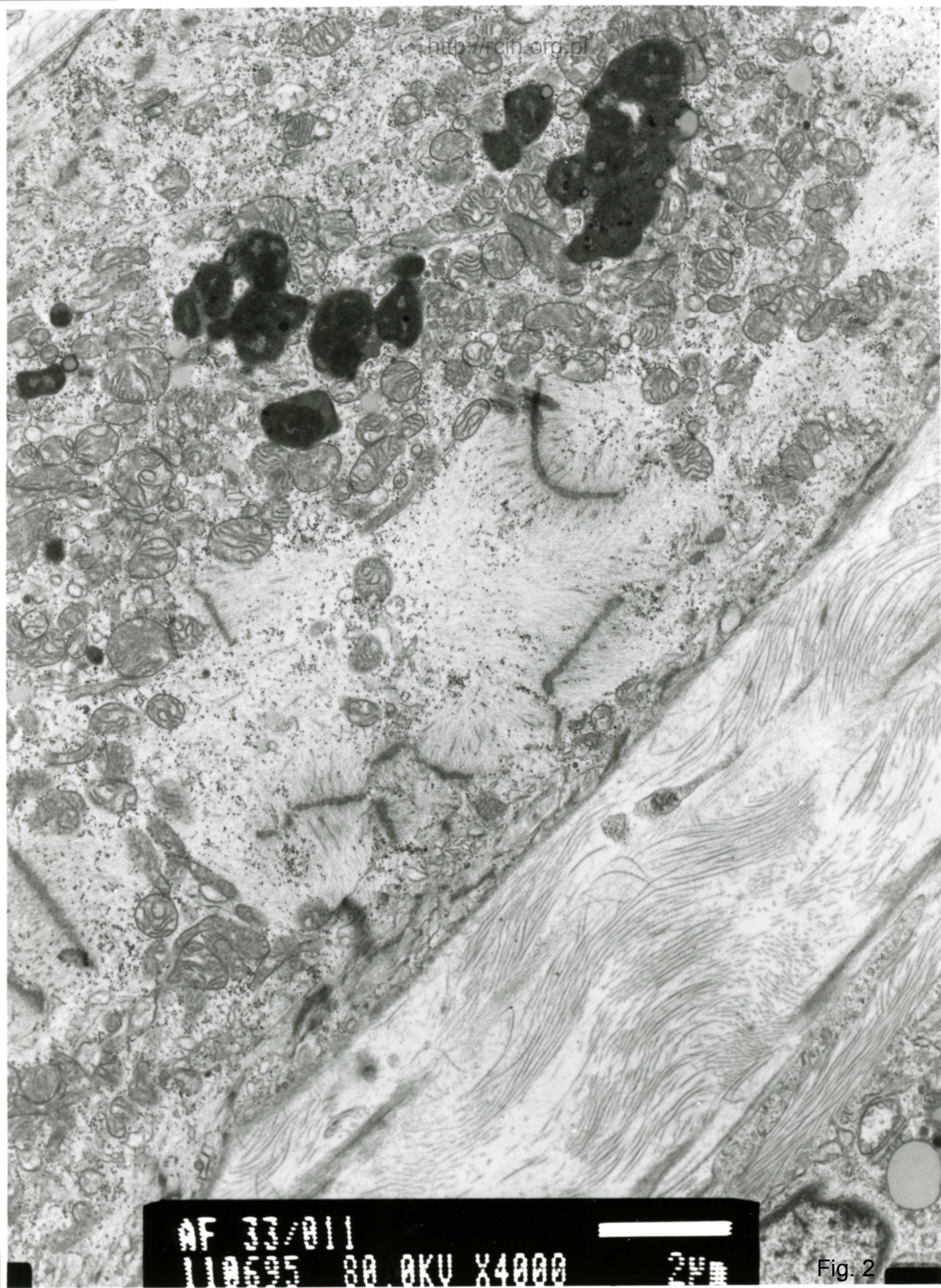
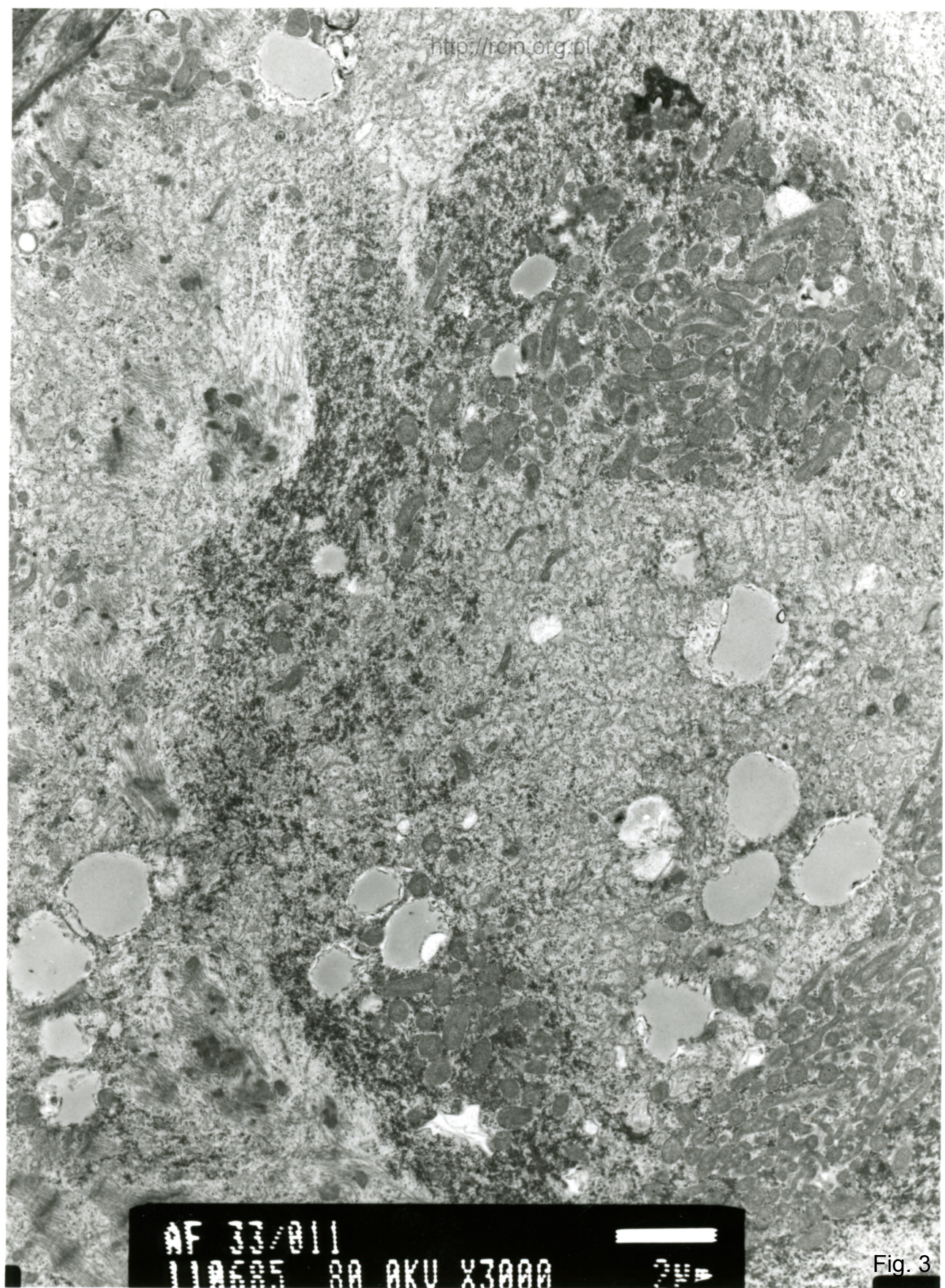


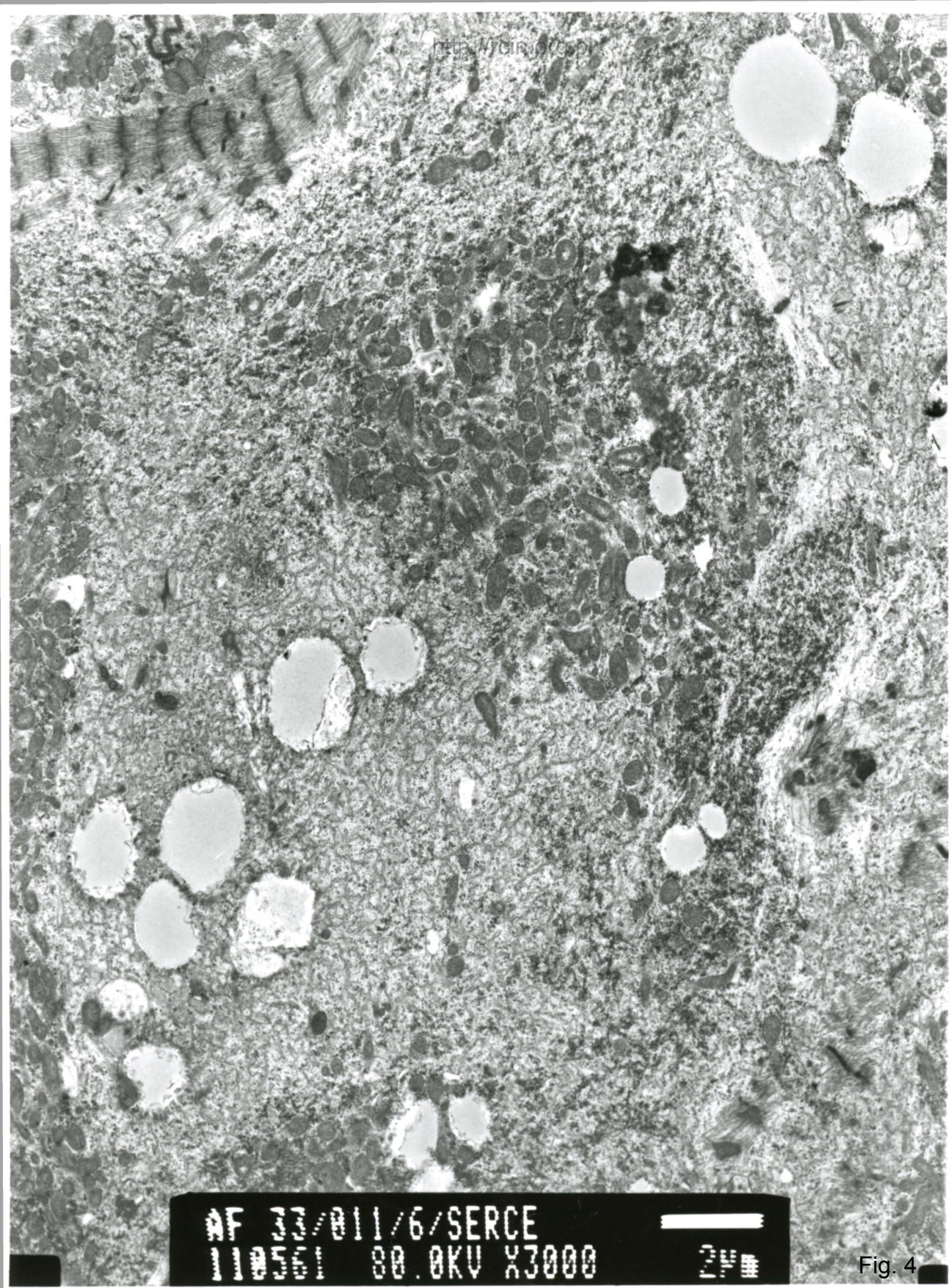
Fig. 2



AF 23/011
110025 80 AKU X3000 2µm

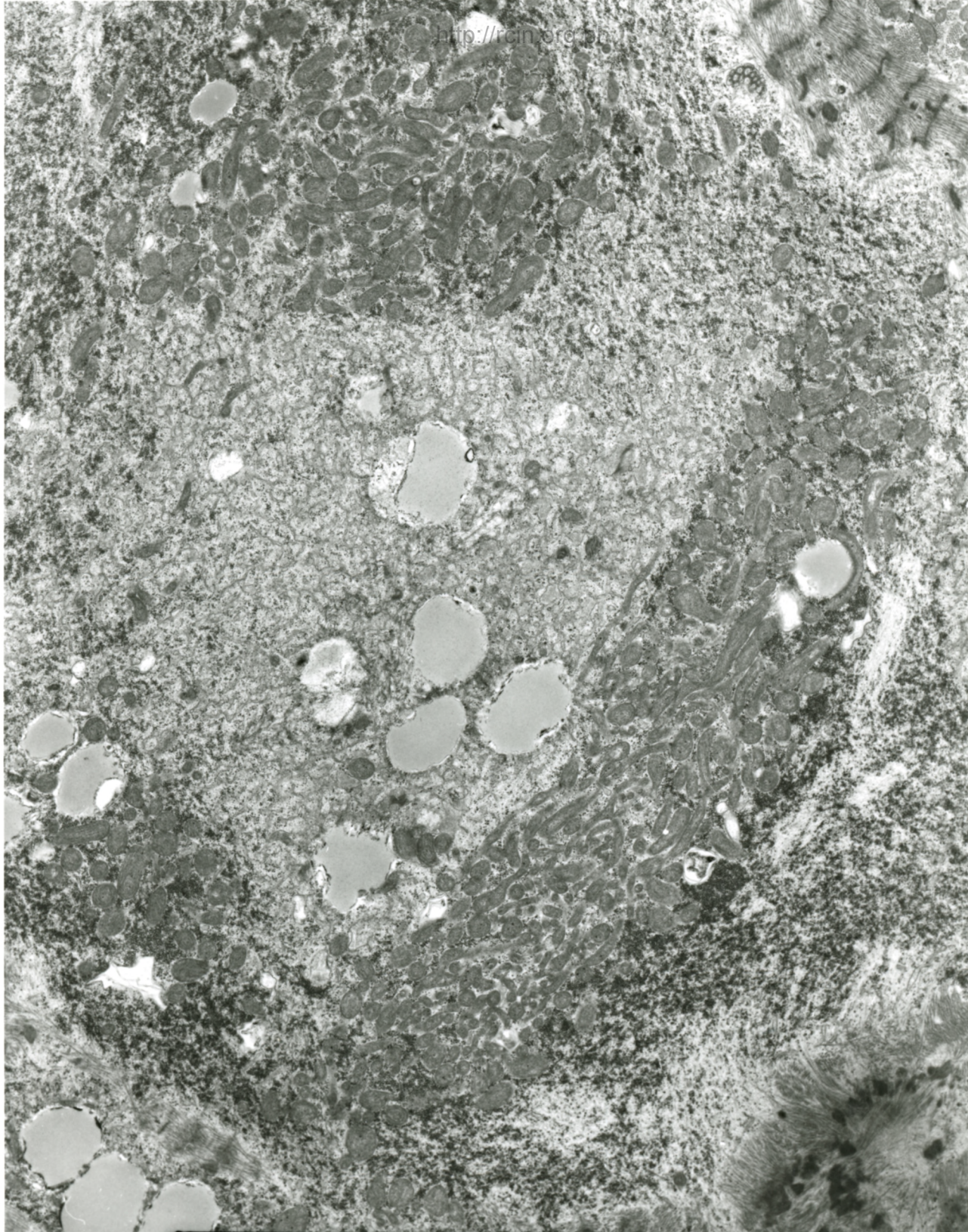
Fig. 3

http://cin.org.pl



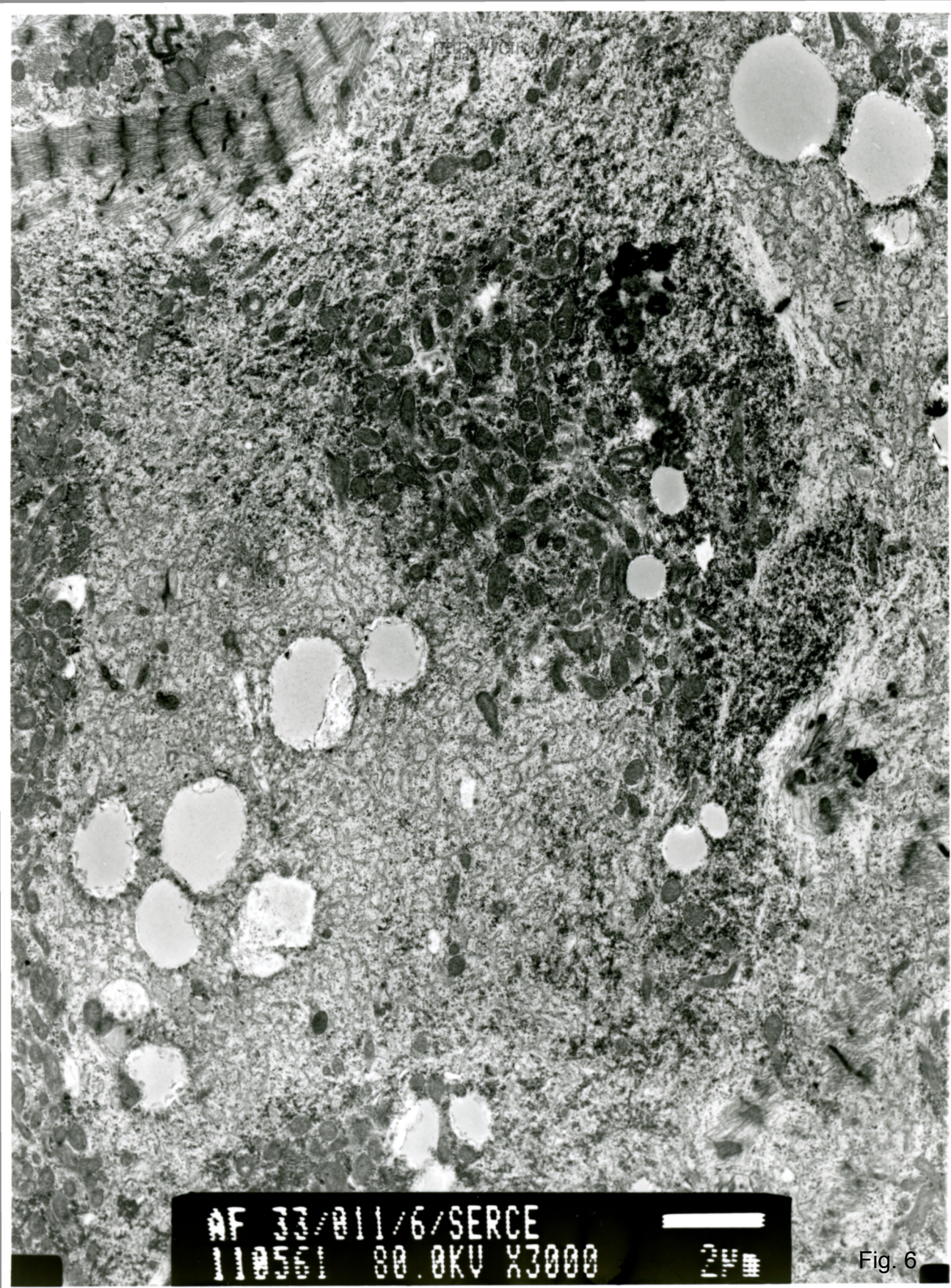
AF 33/011/6/SERCE
110561 80.0KV X3000 2µm

Fig. 4



AF 33/011
110526 30 AKU X3000

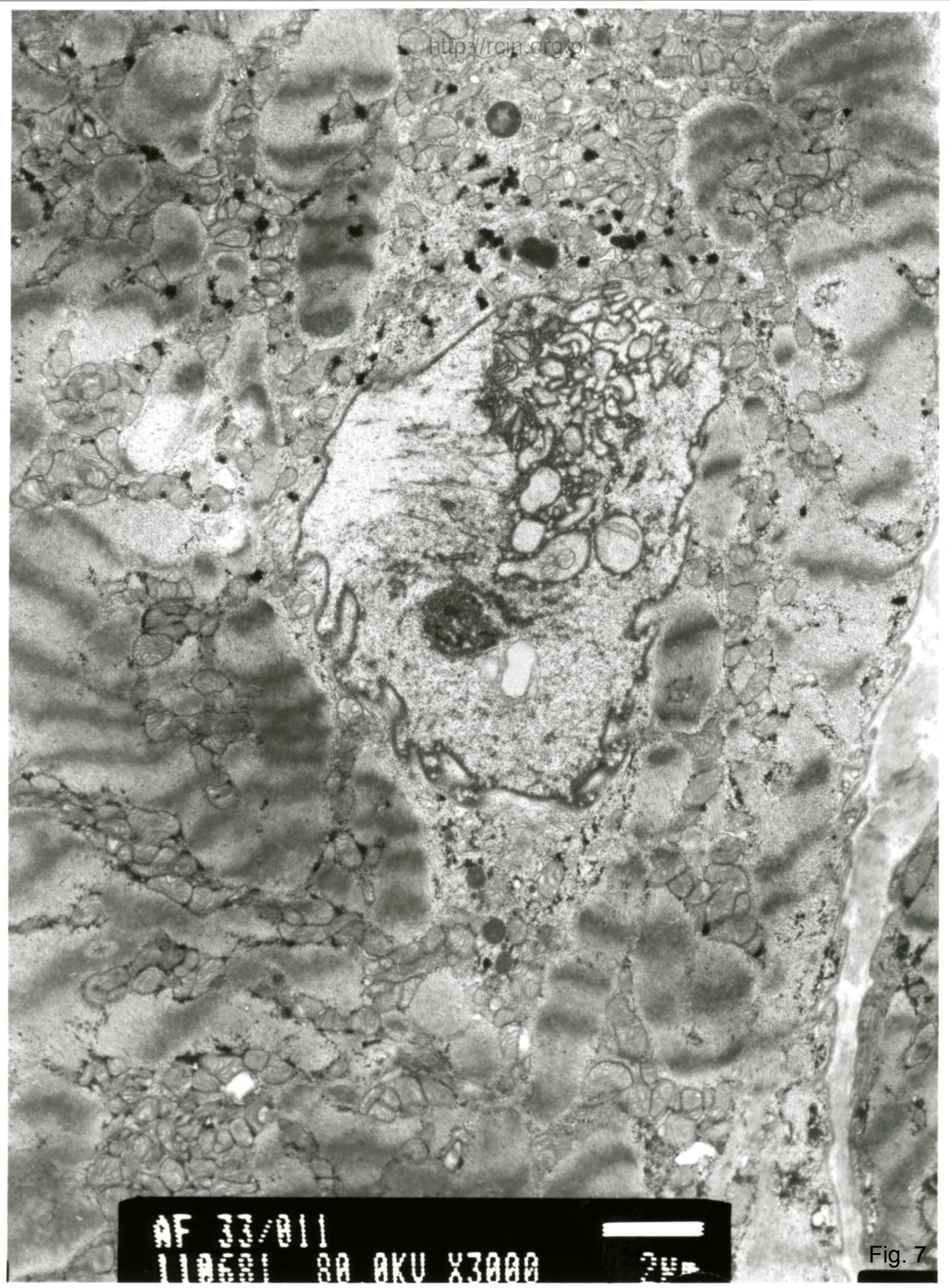
Fig. 5



AF 33/011/6/SERCE
110561 80.0KV X3000

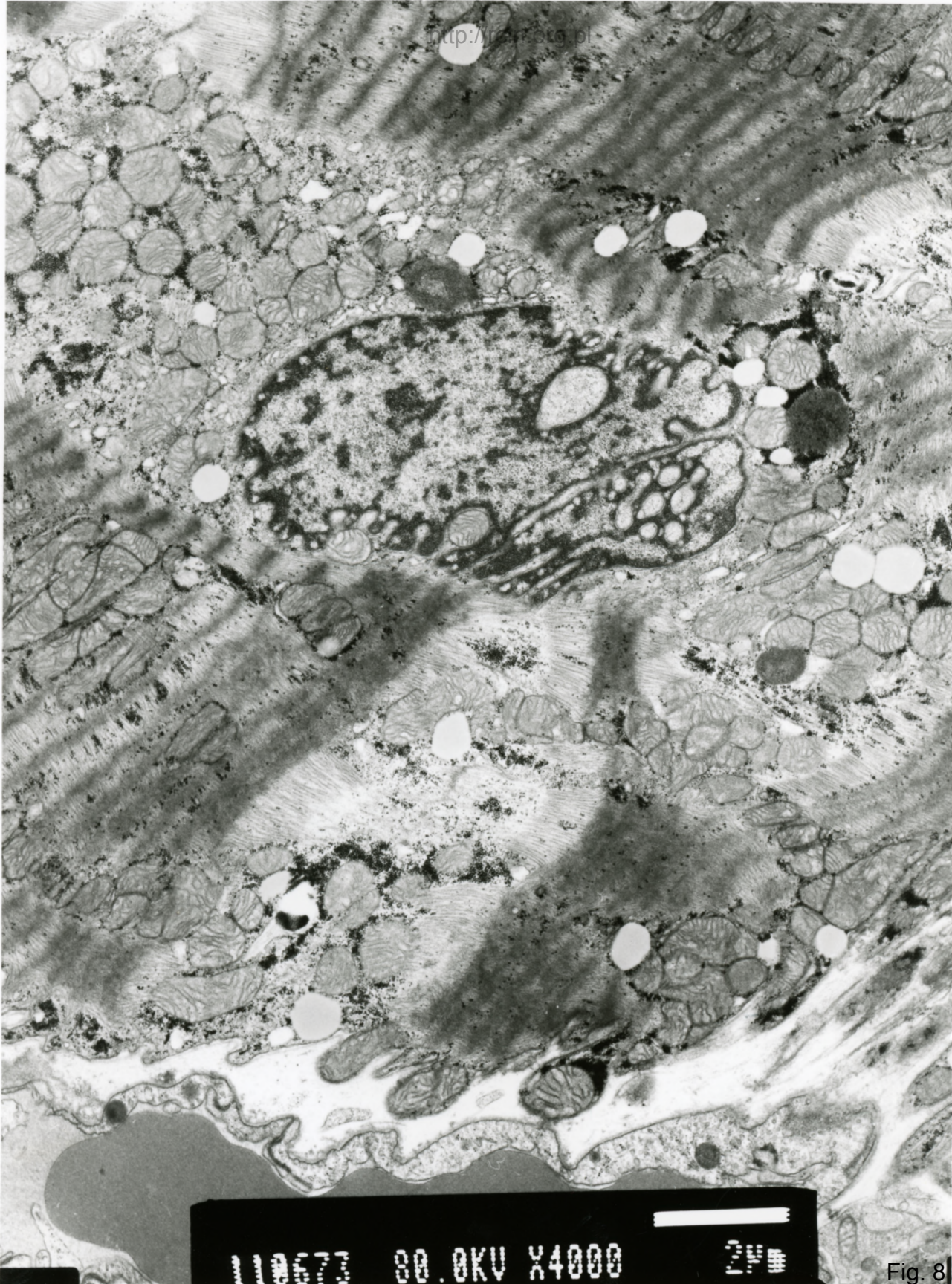


Fig. 6

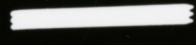


AF 22/011
110001 80 0KV X3000

Fig. 7

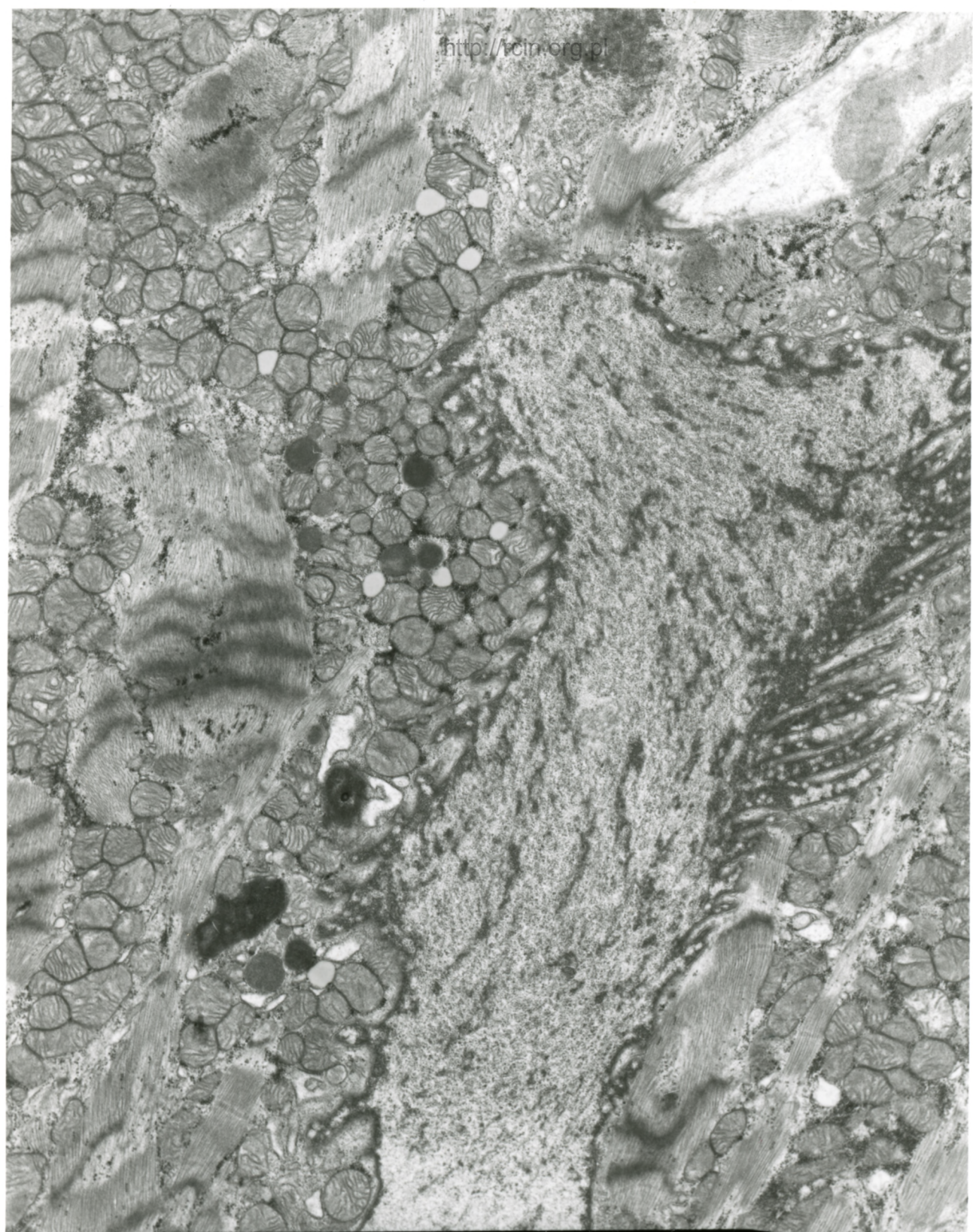


110673 80.0KV X4000



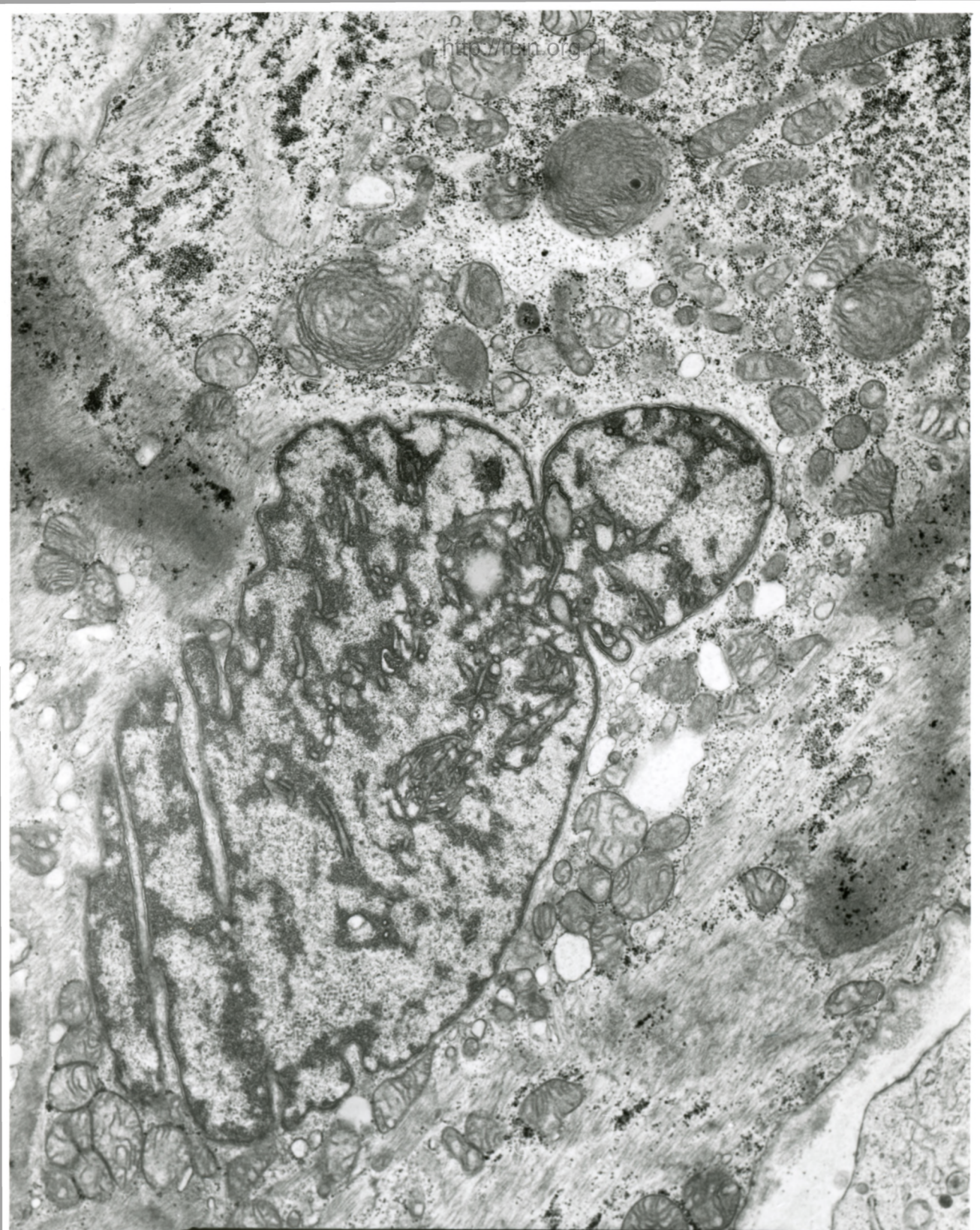
2µm

Fig. 8



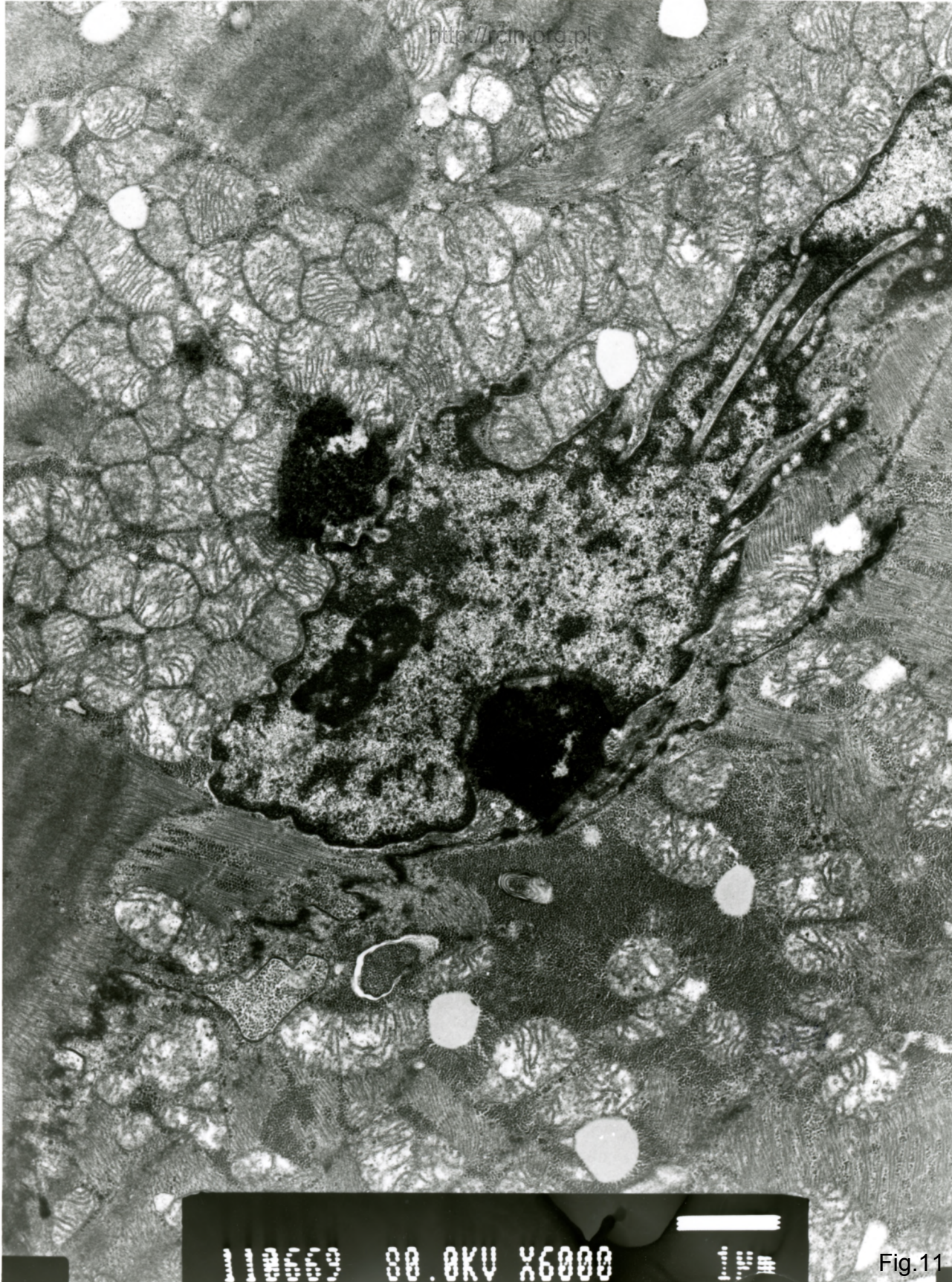
AF 33/011
110037 80.0KV X4000 2µm

Fig. 9



AF 35/011/SERCE
110757 80.0KV X5000

Fig.10



110669 80.0KV X6000

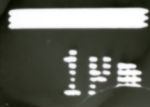
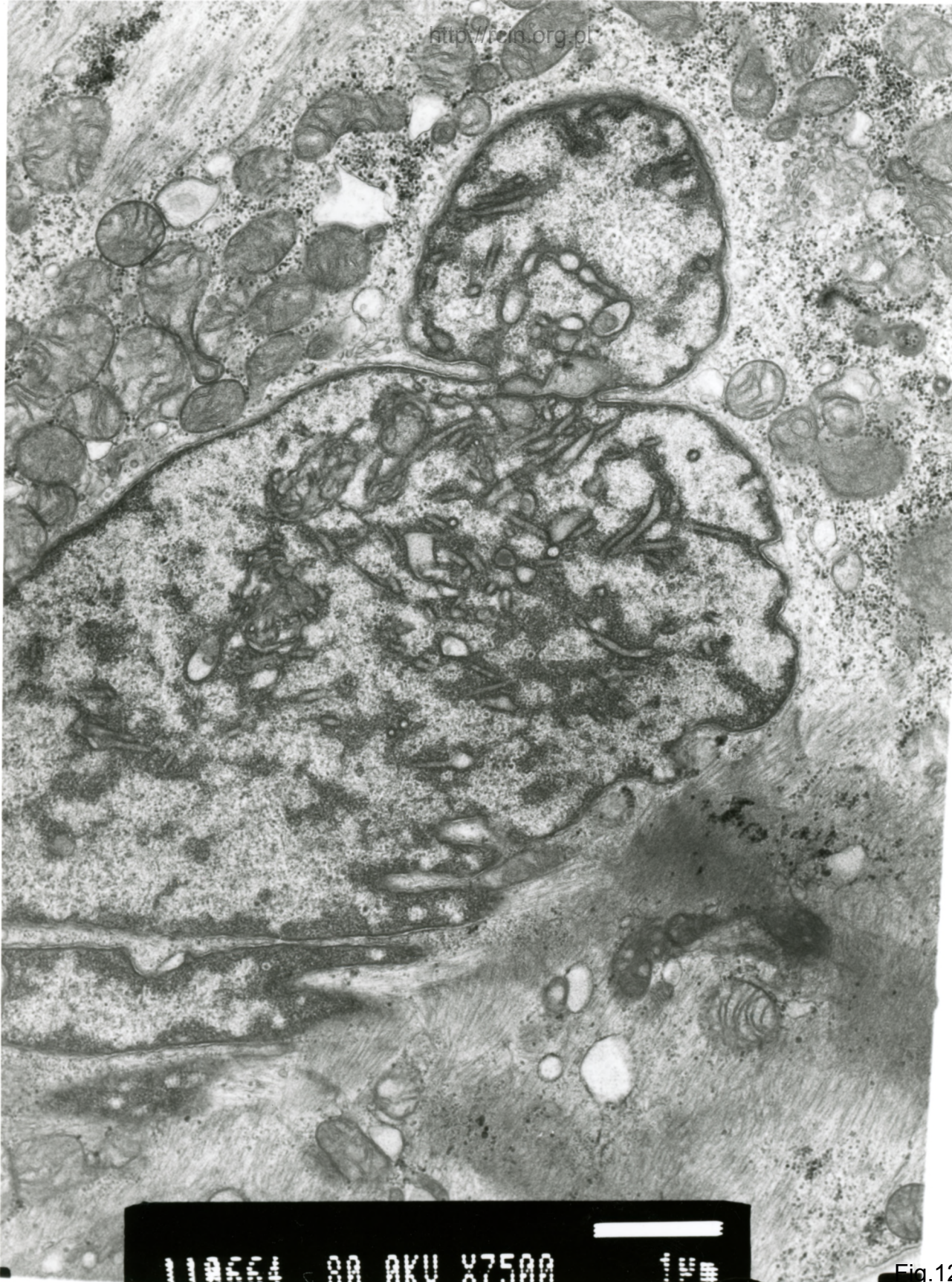
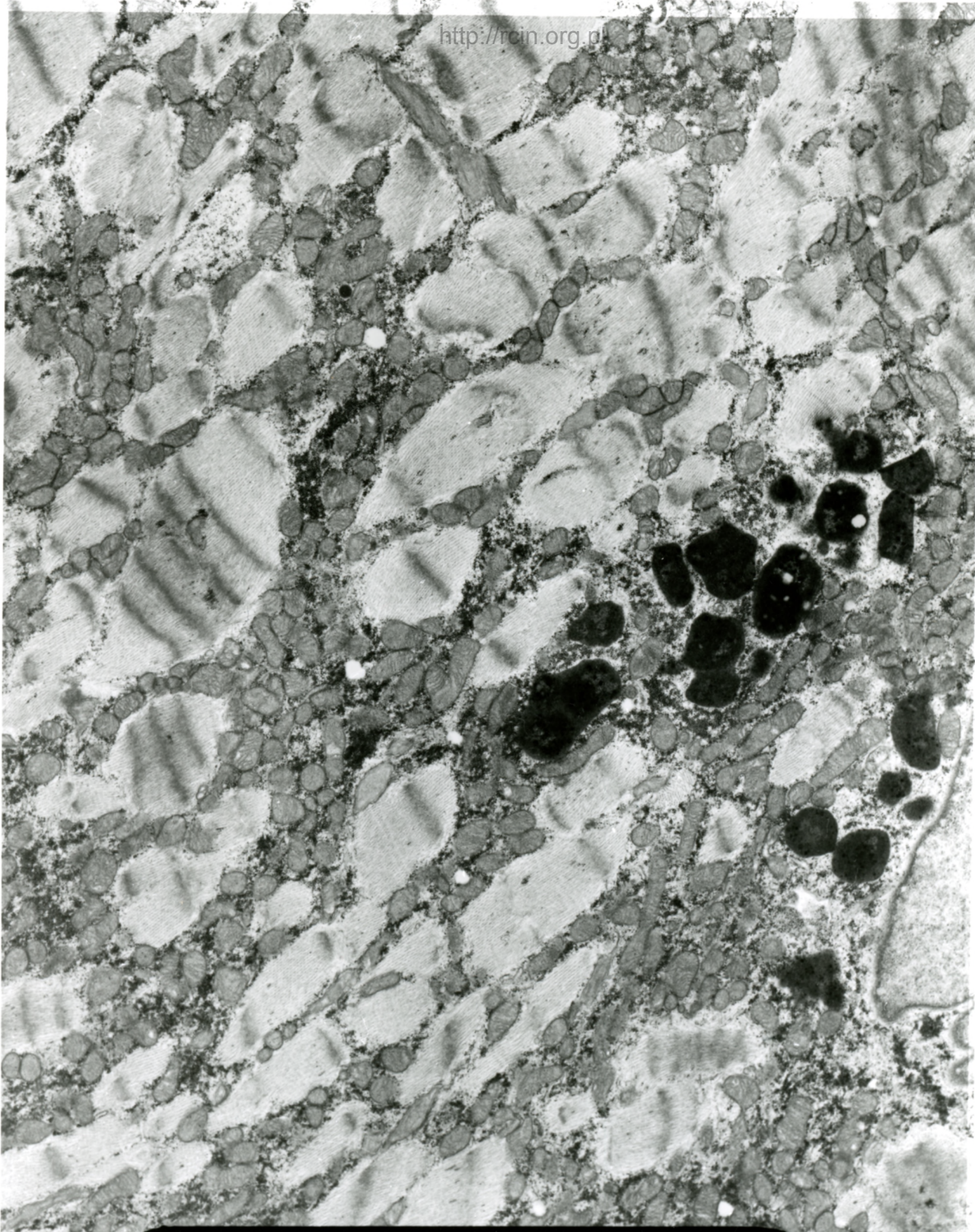


Fig. 11



110664 80.0KV X7500

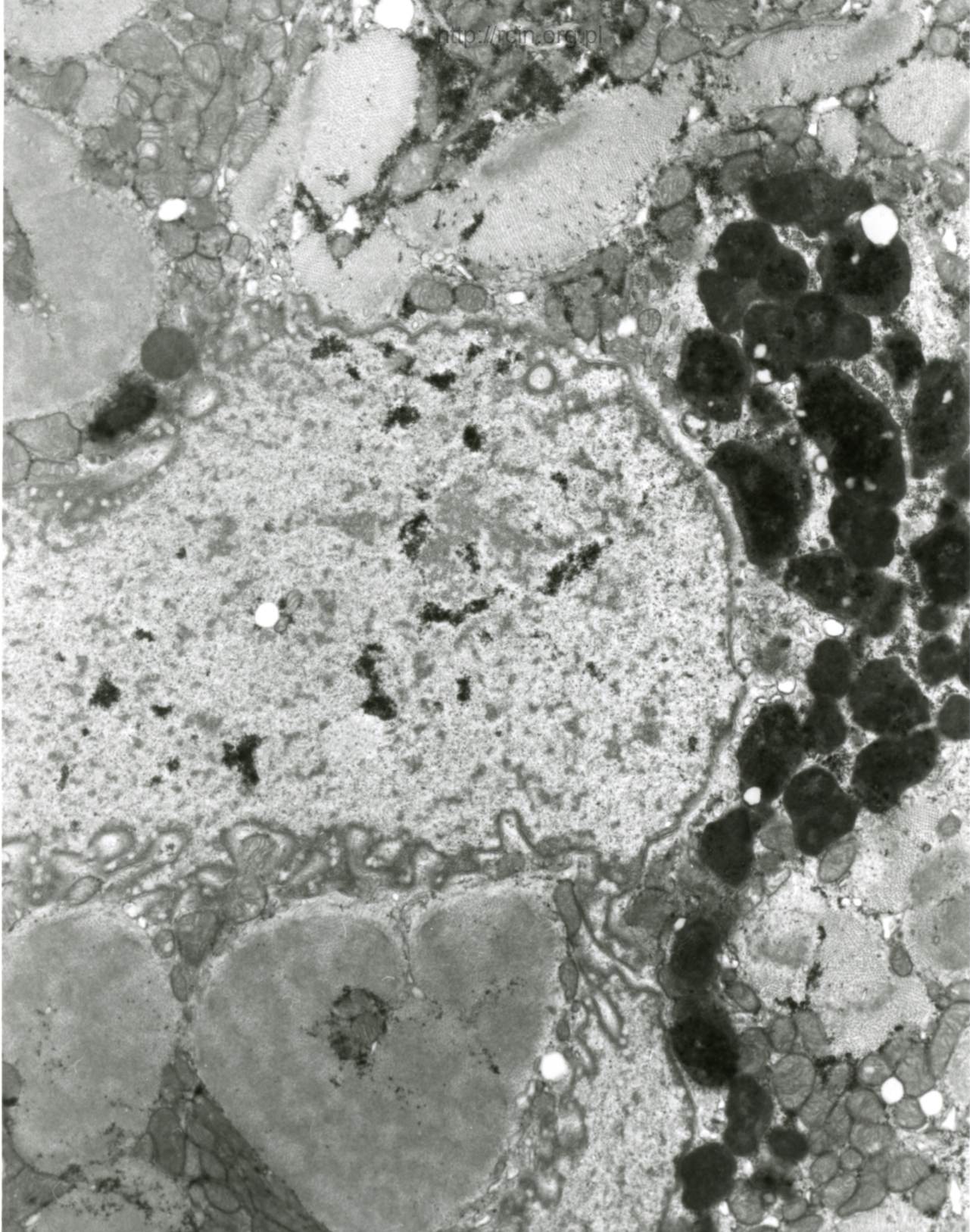
Fig.12



AF 33/011/6/SERCE
110560 80.0KV X3000

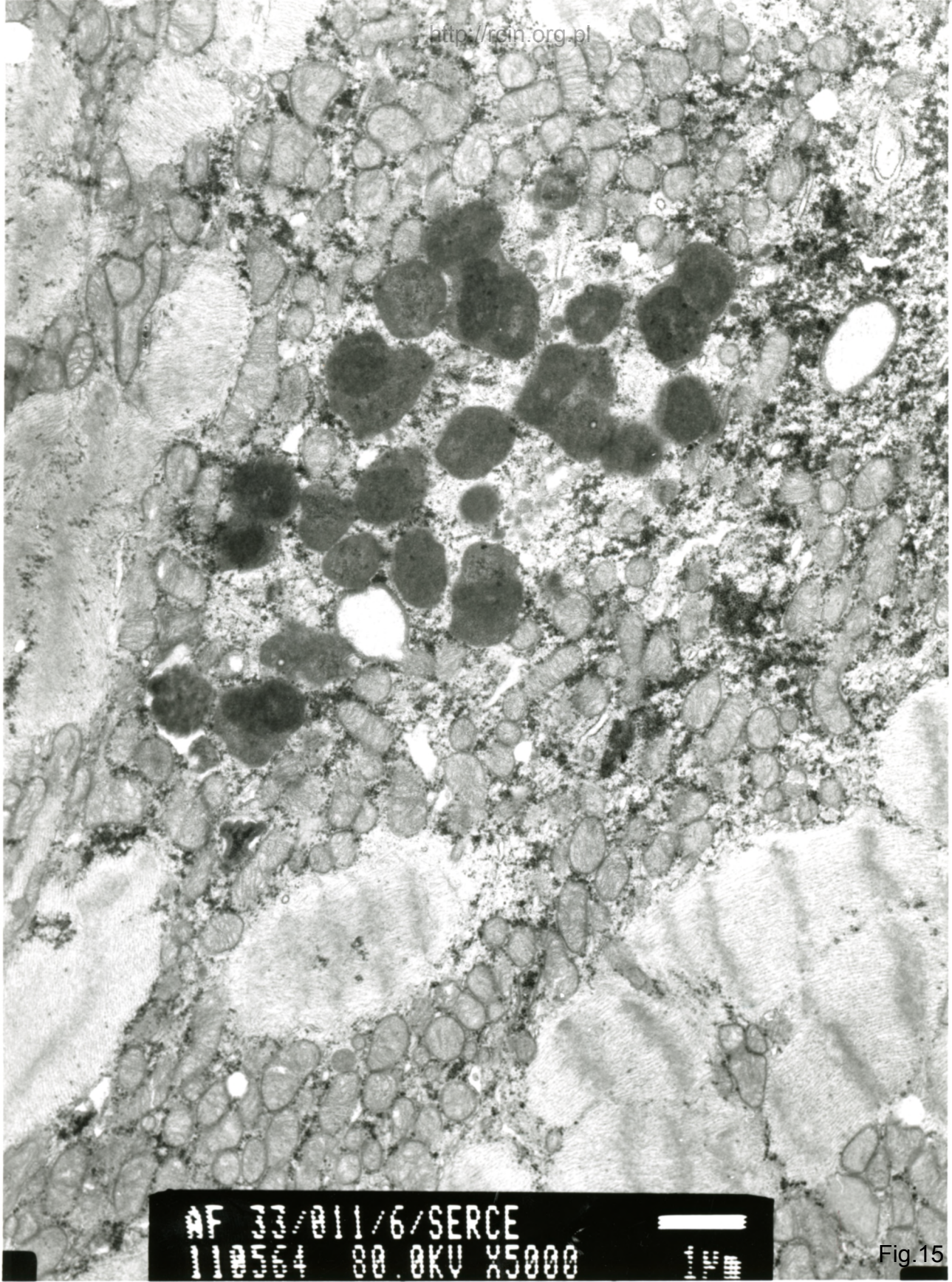


Fig.13



AF 33/011
110500 80 AKU X4000 30

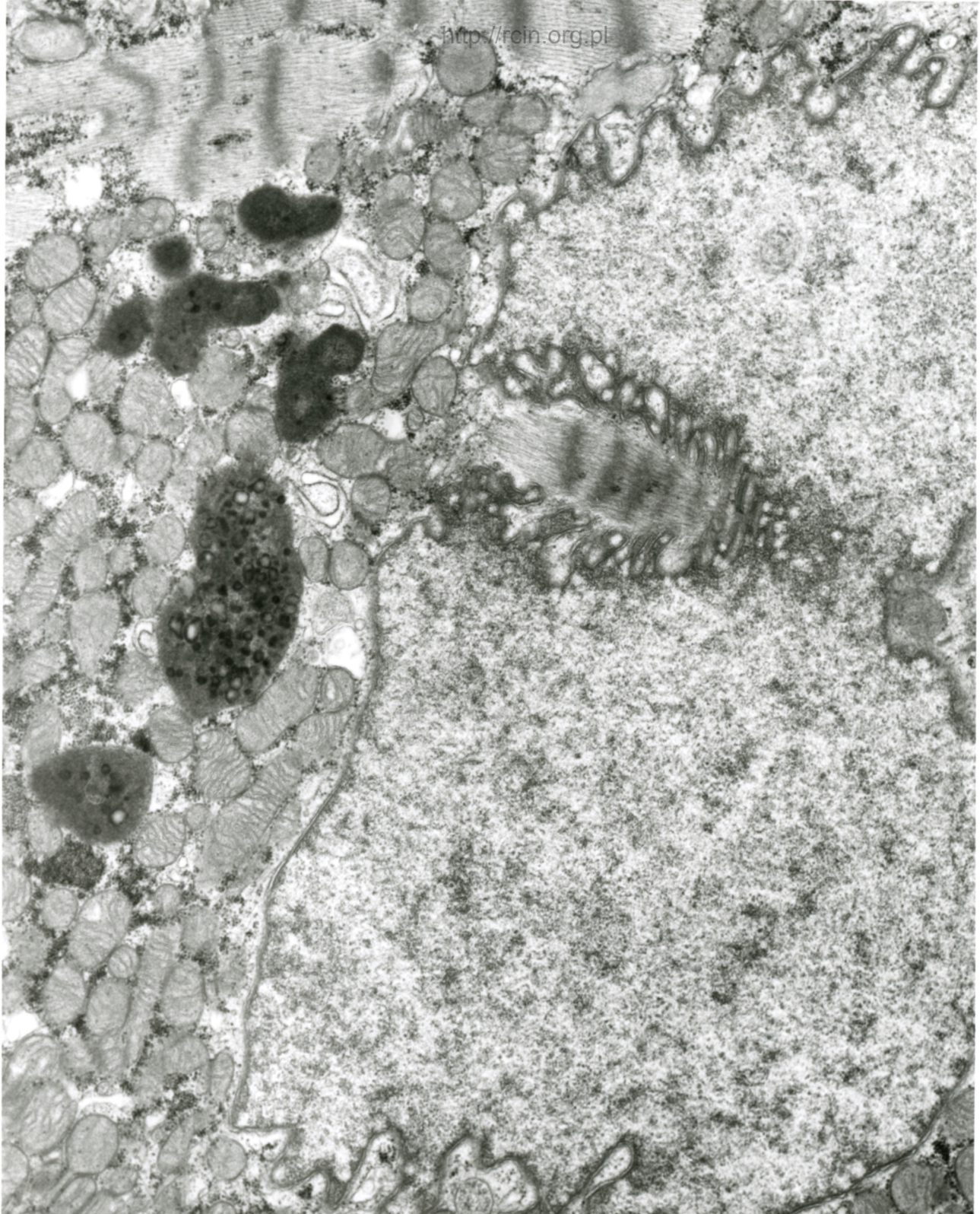
Fig.14



AF 33/011/6/SERCE
1984 80.0KV X5000



Fig.15



AF 33/011/6/SERCE
110565 80.0KV X6000

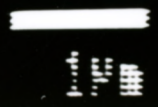
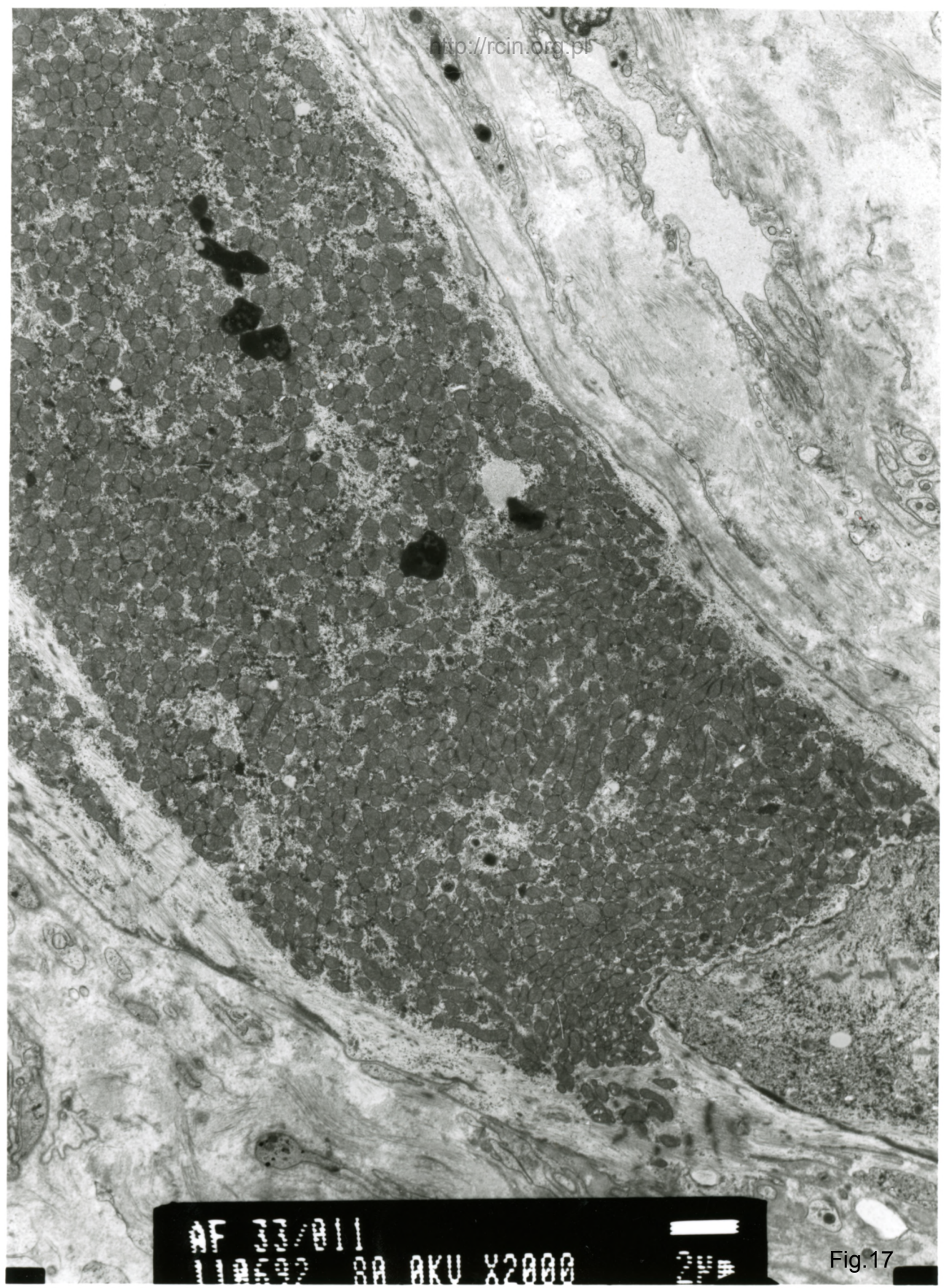


Fig.16



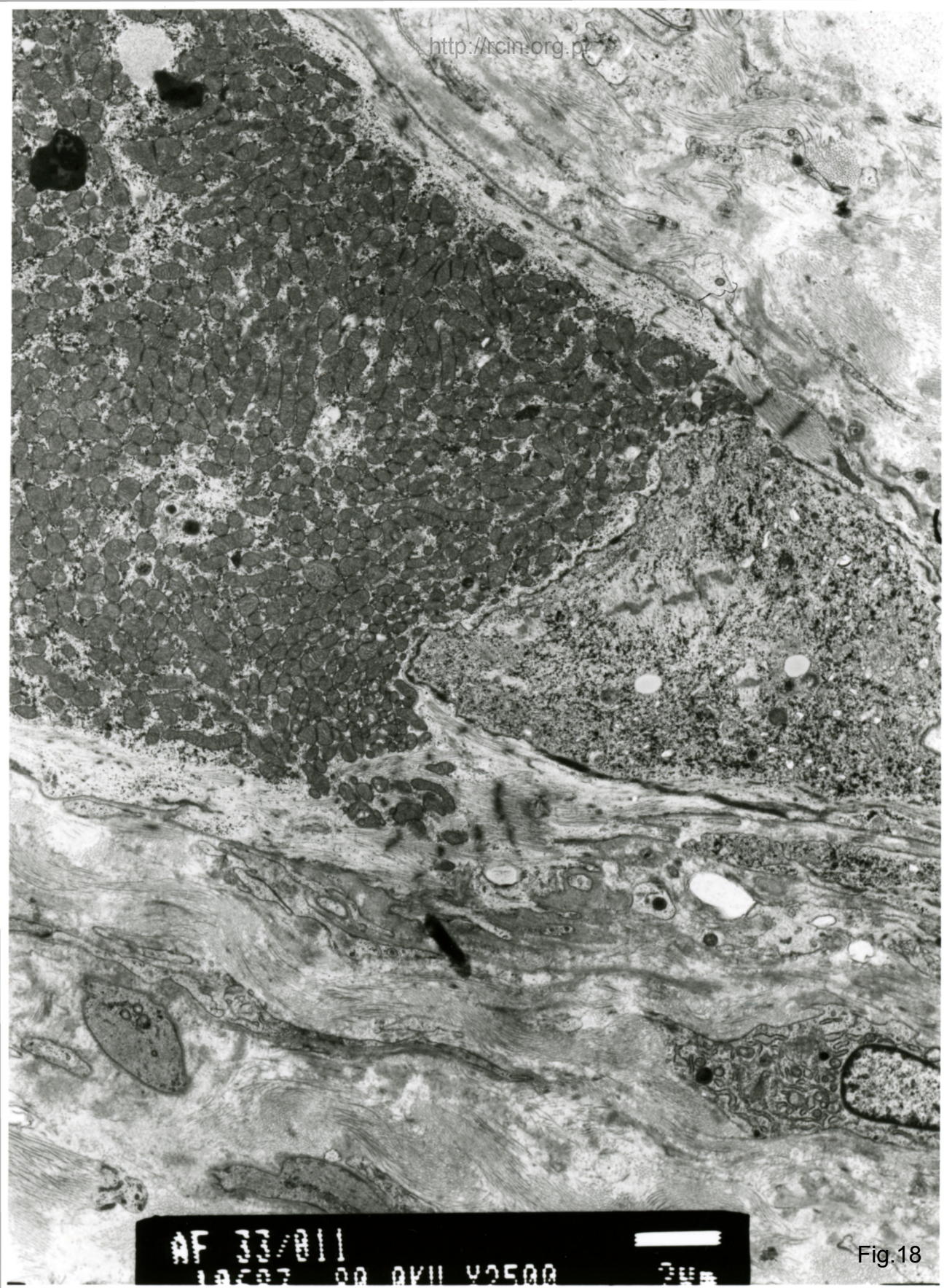
AF 33/011

110502 80 0KV X2000



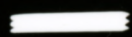
20 μm

Fig.17



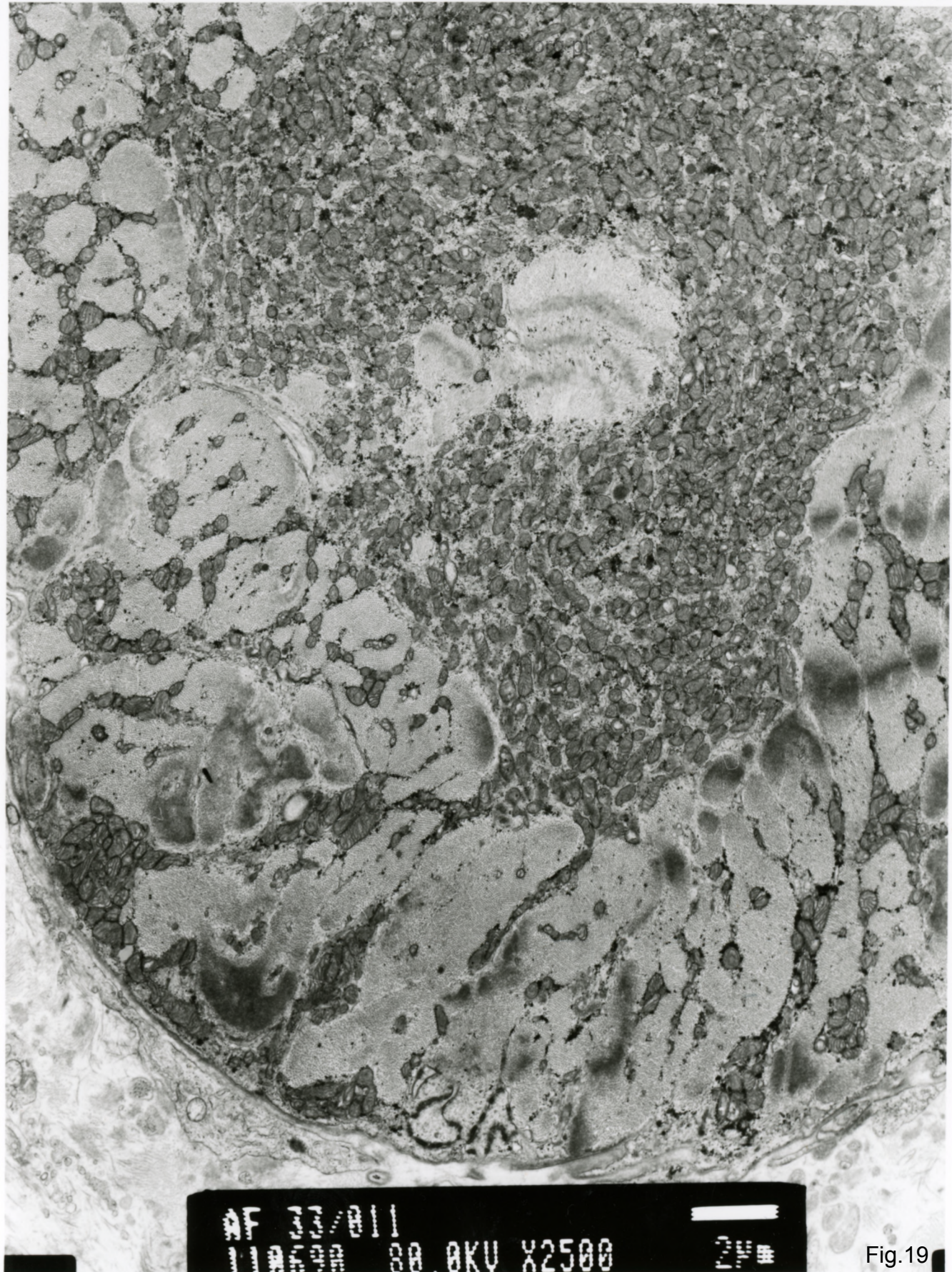
AF 33/011

19597 00 0X11 02500



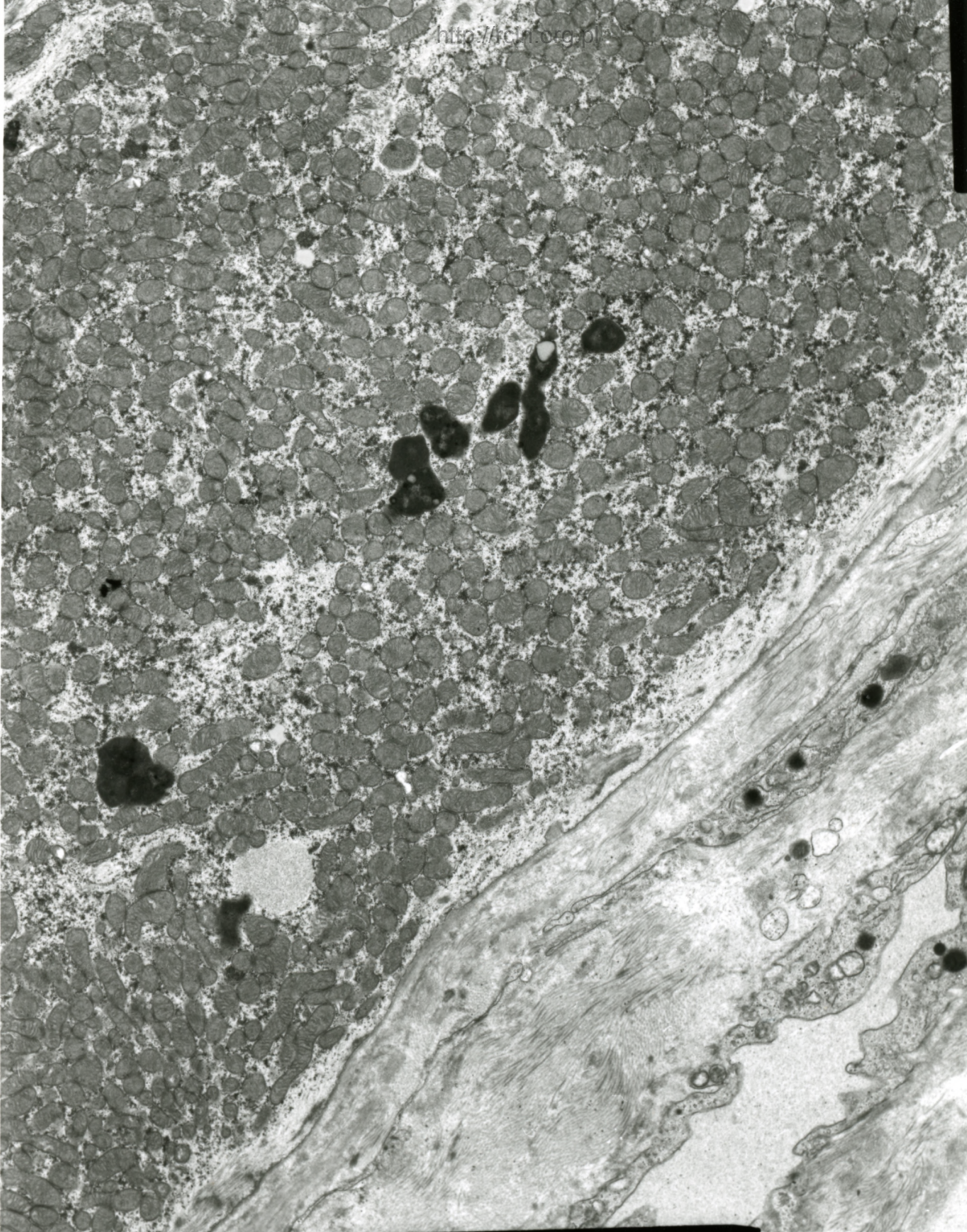
348

Fig.18



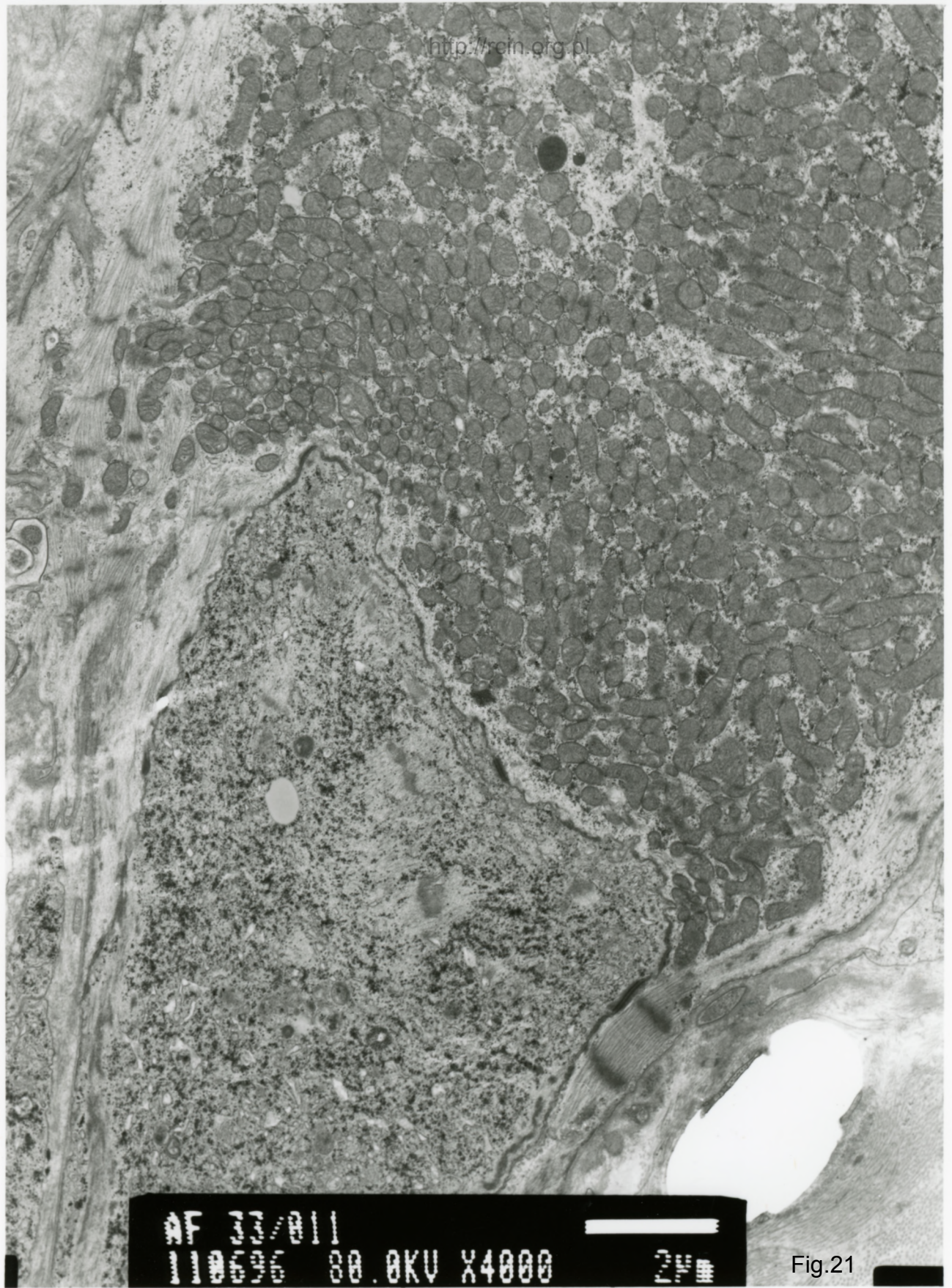
AF 22/011
11/03/90 30.0KV X2500 2µm

Fig. 19



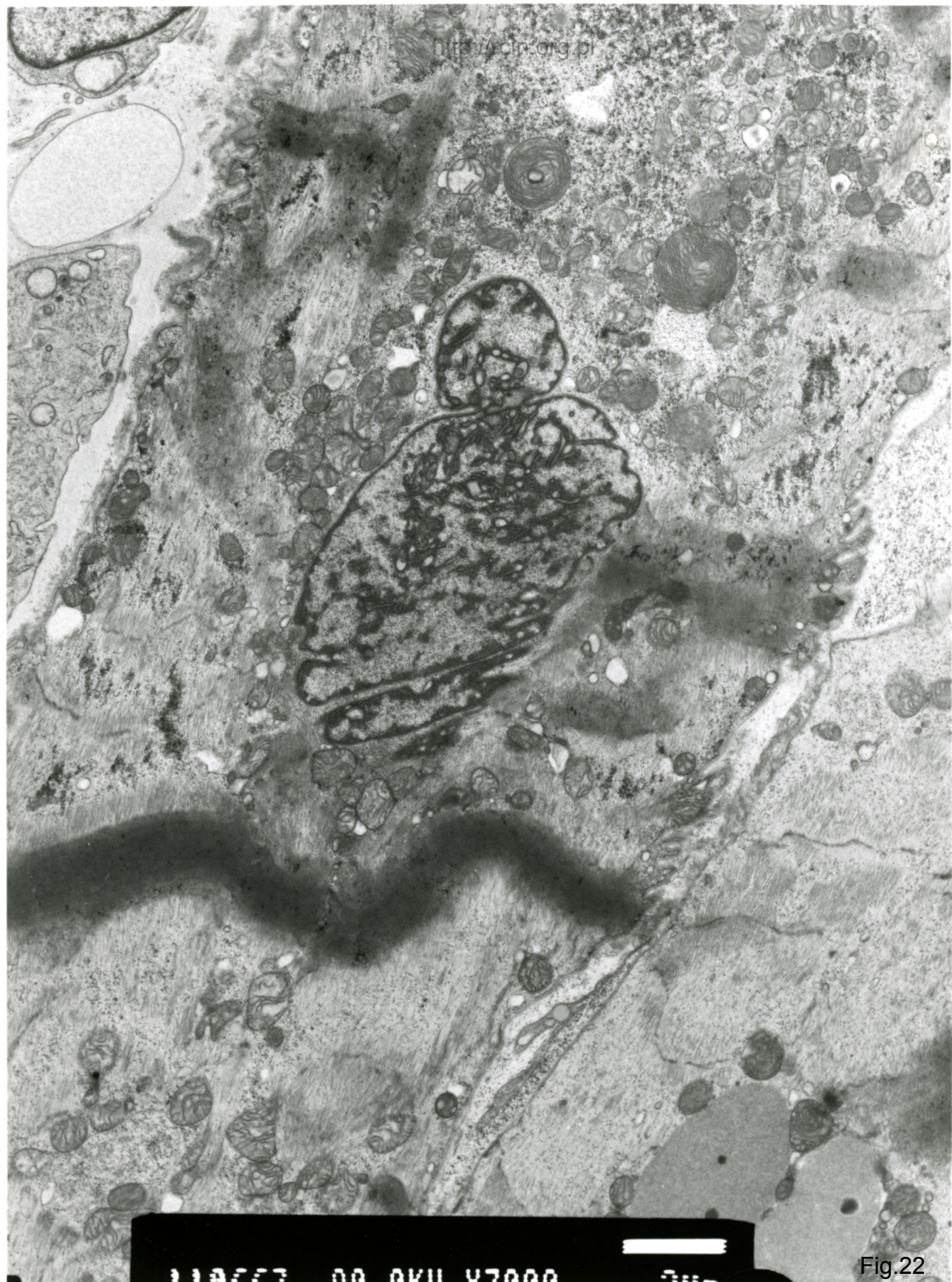
AF 22/011
11/01/02 00 AKU Y3000

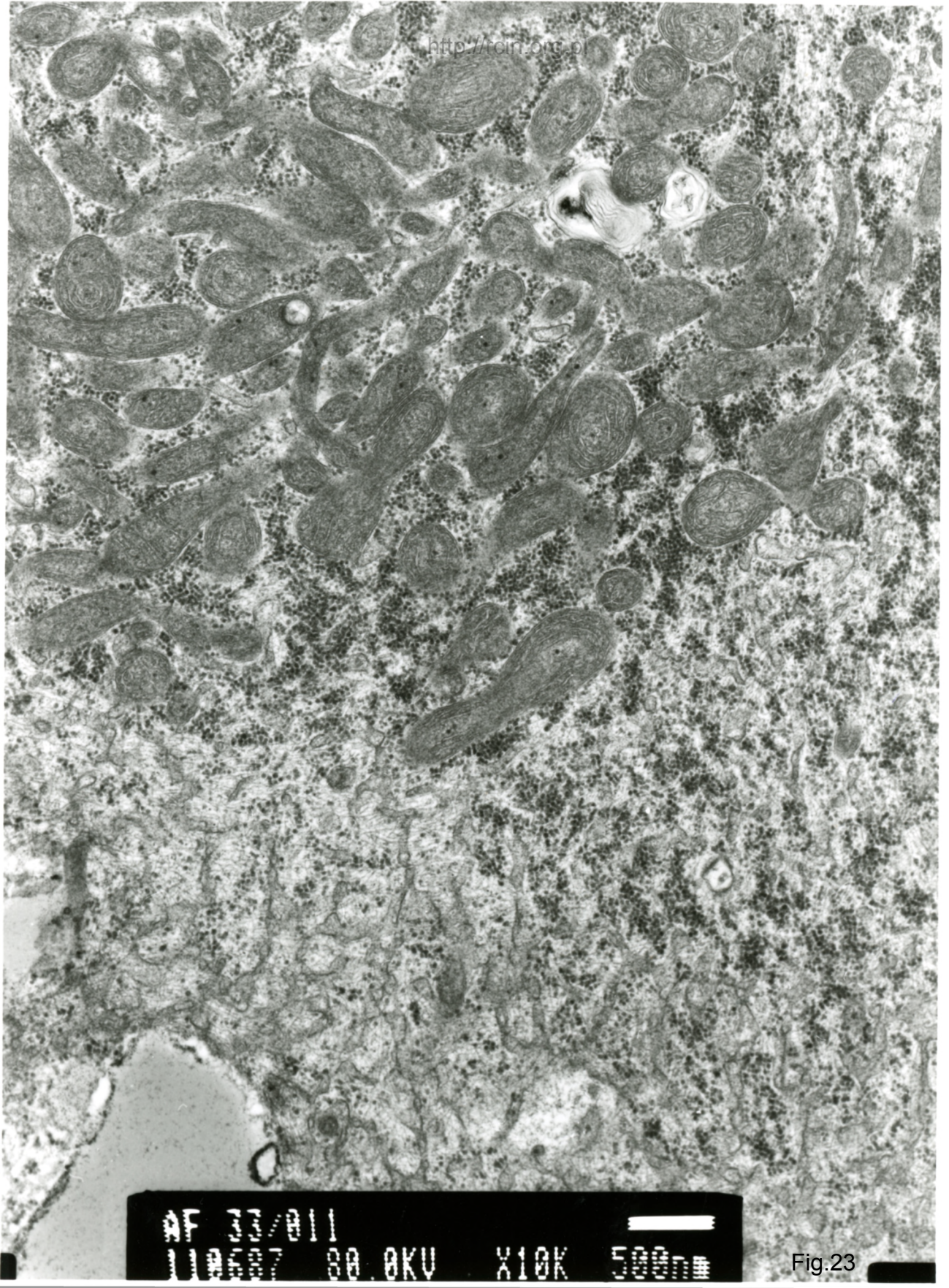
Fig.20



AF 33/011
110696 80.0KV X4000 2µm

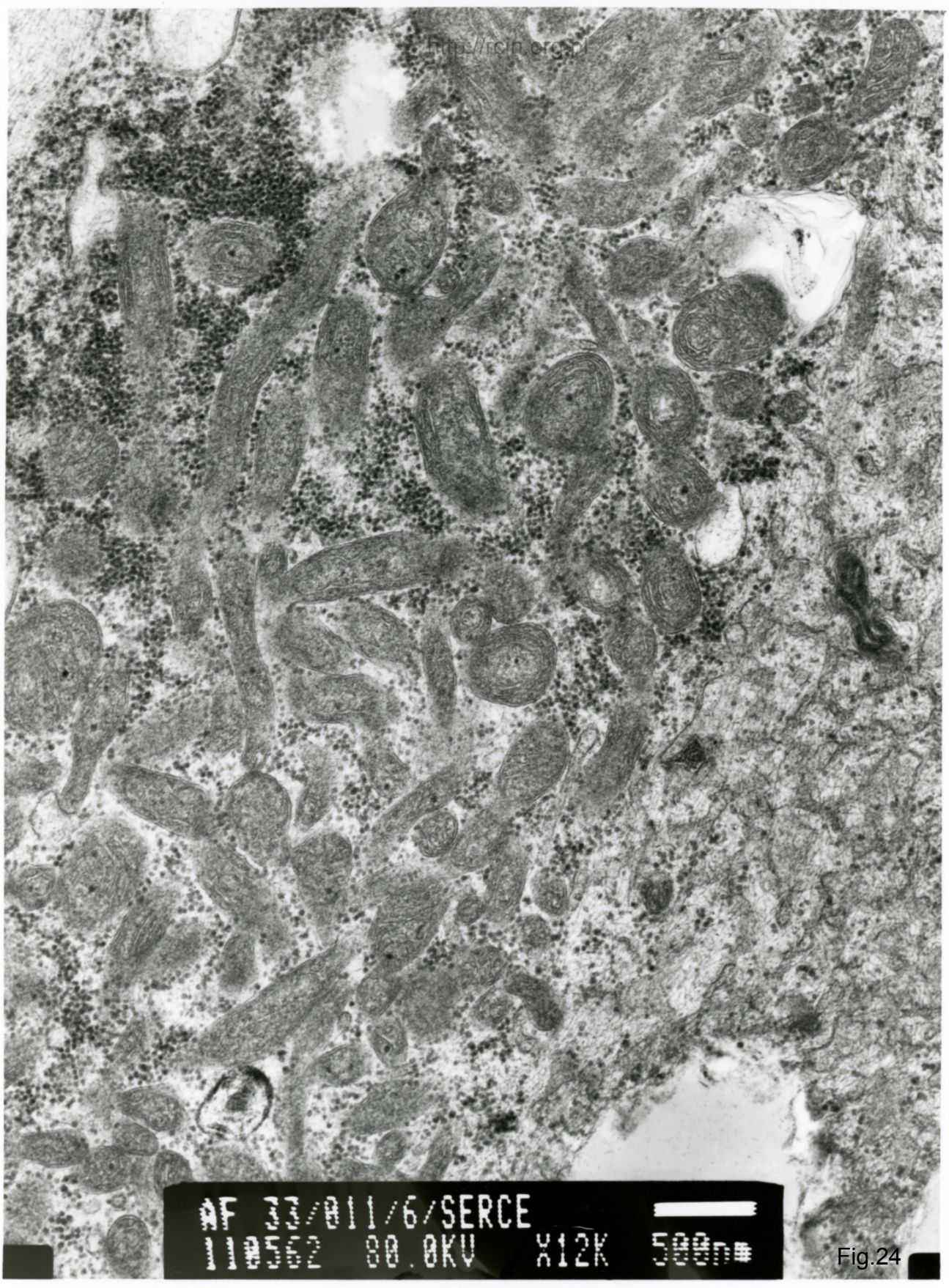
Fig.21





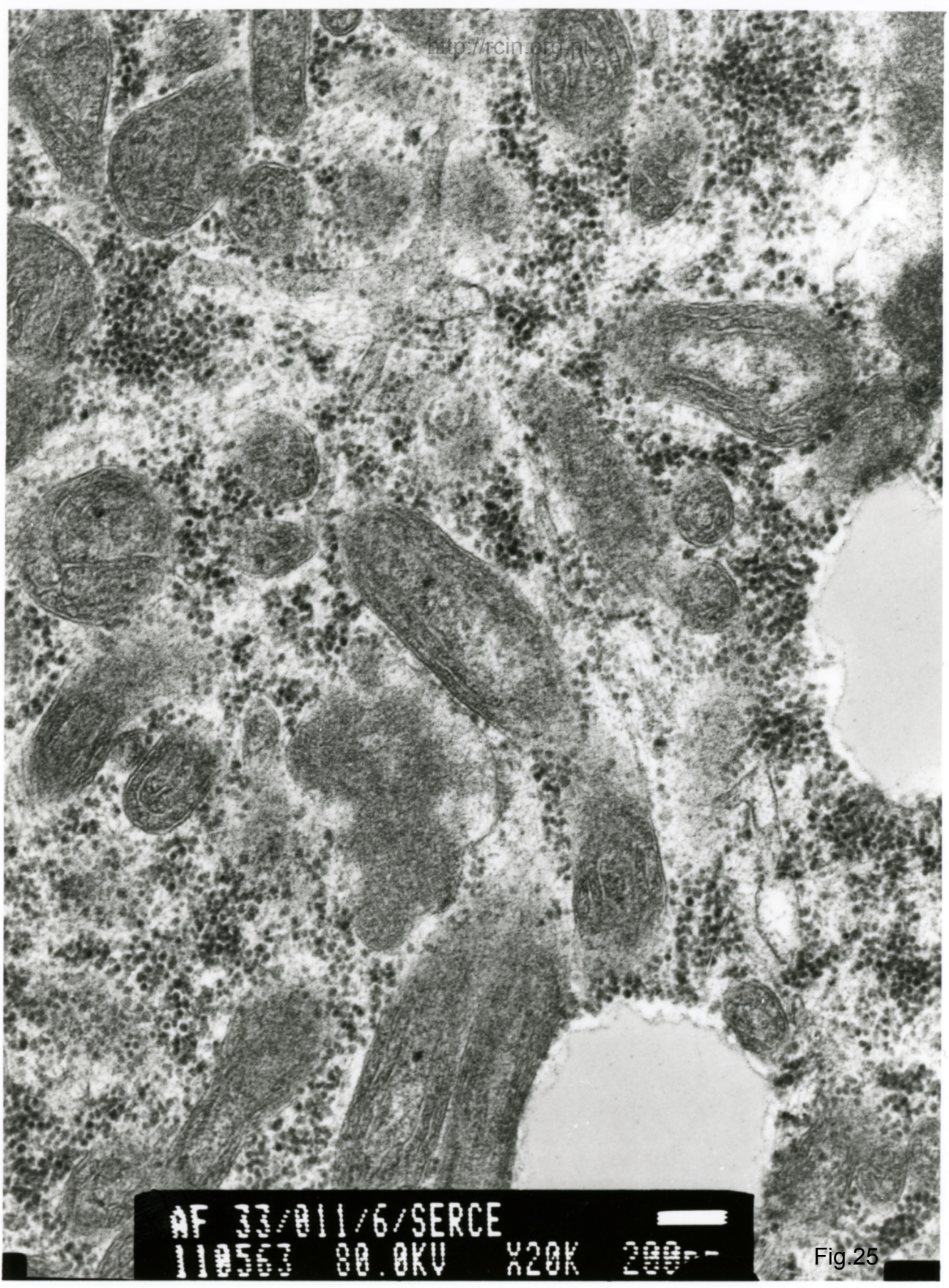
AF 33/011
110587 80.0KV X10K 500nm

Fig.23



AF 33/011/6/SERCE
110562 80.0KV X12K 500nm

Fig.24



AF 33/011/6/SERCE
110563 80.0KV X20K 200

Fig.25

33/11

Uszkodzenie mięśnia sercowego

Obserwowano znaczne zaburzenia w układzie sarkomerów. Ocena ultrastrukturalna wykazała również zmiany w przebiegu miofibrili oraz ich dezorganizację, a w wielu miejscach całkowity ubytek. Widoczne były dość liczne krople lipidów i wtręty drobnowłókienkowe w cytoplazmie (Fig. 1-6). Jądra kardiomiocytów charakteryzowały się nieprawidłowym kształtem, otoczka jądrowa była pofałdowana, tworząca liczne wgłobienia, a miejscami przerwana. Niektóre jądra zawierały w swym wnętrzu organelle komórkowe (Fig. 7-12). Miejscowo, zwłaszcza w pobliżu jąder kardiomiocytów występowały złogi lipofuscyny (Fig. 13-16). W sarkoplazmie obserwowano duże nagromadzenie mitochondriów (Fig. 17-21). Niektóre z nich wykazywały zmiany ultrastrukturalne – widoczne było nieprawidłowe ułożenie grzebieni mitochondrialnych (Fig. 22-25).

Myocardial damage

Significant changes in sarcomere pattern were observed. The ultrastructural evaluation revealed also changes in the course of myofibrils and their disorganization, often a total loss of myofibrils was noticed. Quite numerous lipid droplets were visible (Figs. 1-6). The cardiomyocyte nuclei were characterized by abnormal shape, the nuclear envelope was corrugated, forming numerous invaginations, and broken in some parts. Some nuclei contained cellular organelles inside them (Figs. 7-12). Focally, especially in the vicinity of cardiomyocyte nuclei deposits of lipofuscin were seen (Figs. 13-16). A large accumulation of mitochondria was observed in sarcoplasm (Fig. 17-21). Some of them showed ultrastructural changes - abnormal arrangement of mitochondrial cristae was visible (Fig. 22-25).