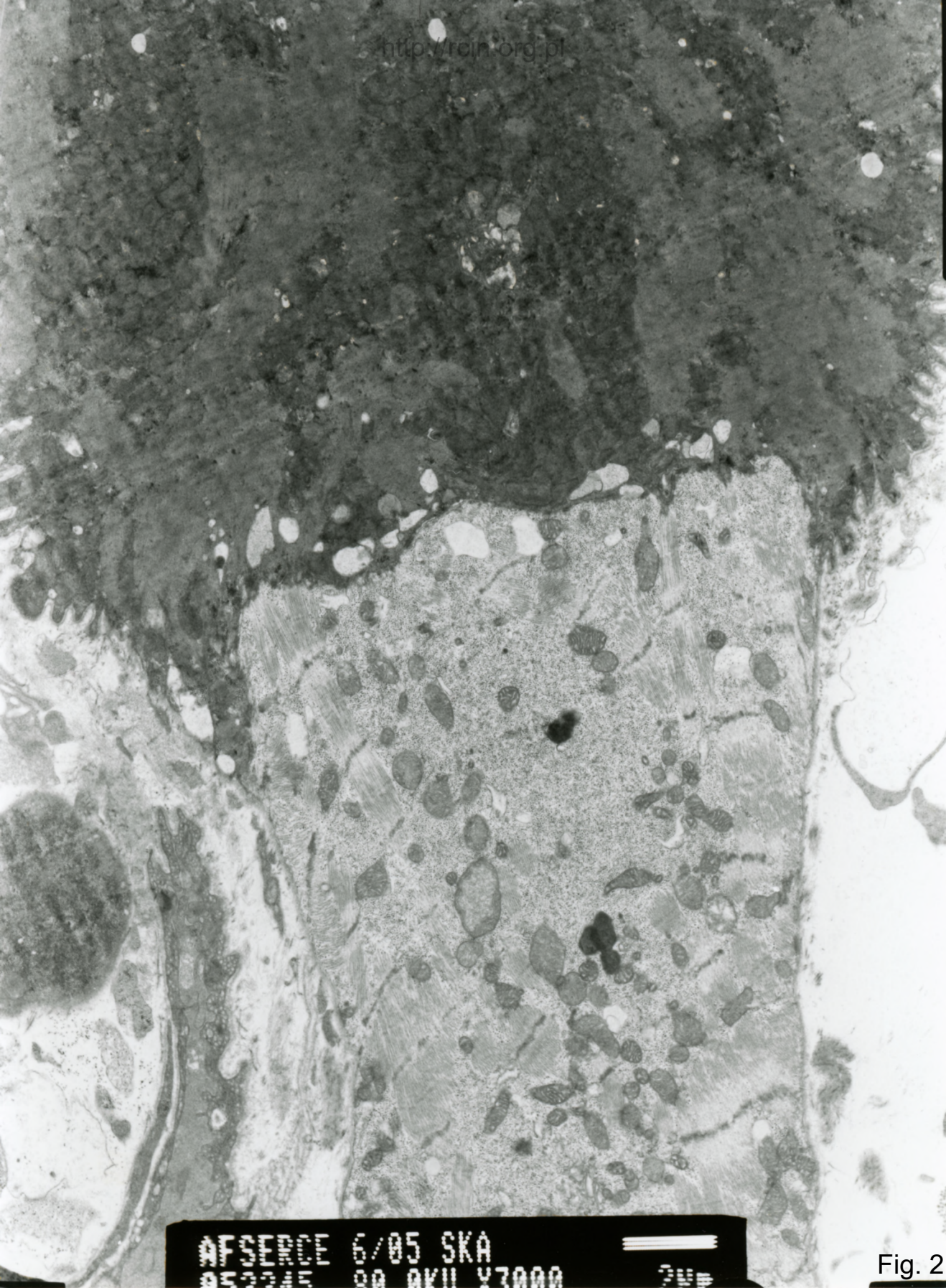


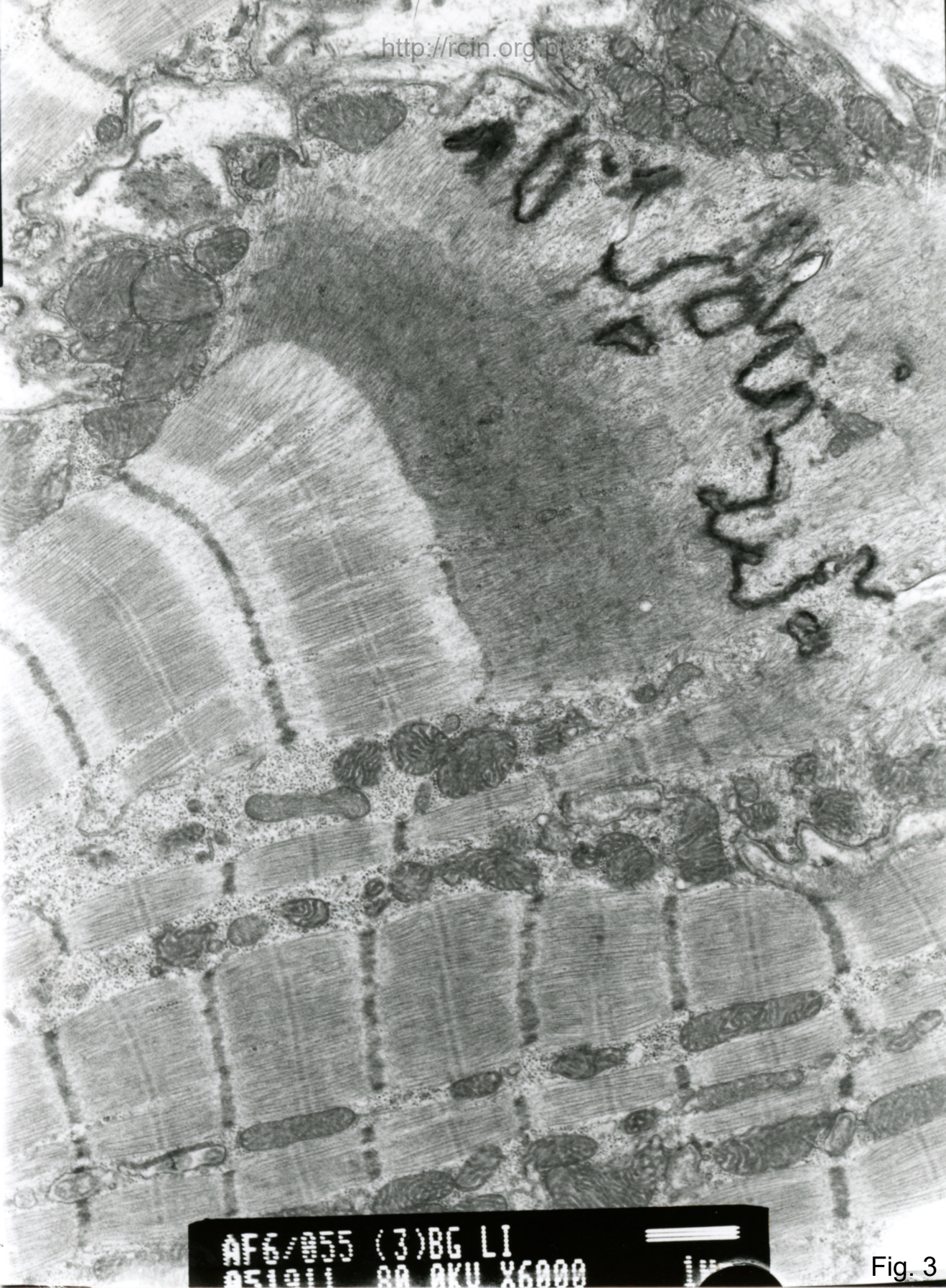
AFSERCE 6/05 SKA
052248 80 AKU X3000

Fig. 1



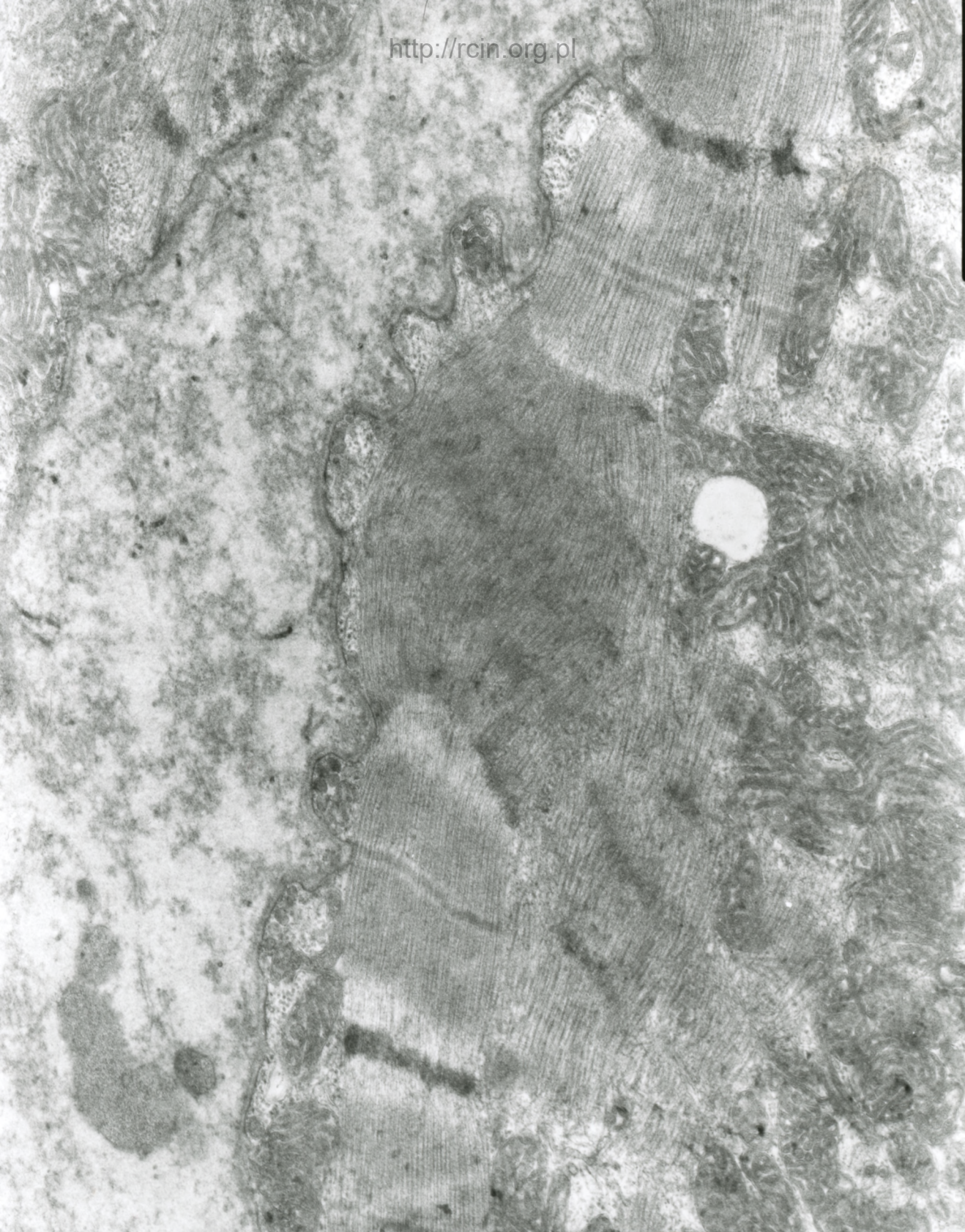
AFSERCE 6/05 SKA
053242 00 AKU 47000 200

Fig. 2



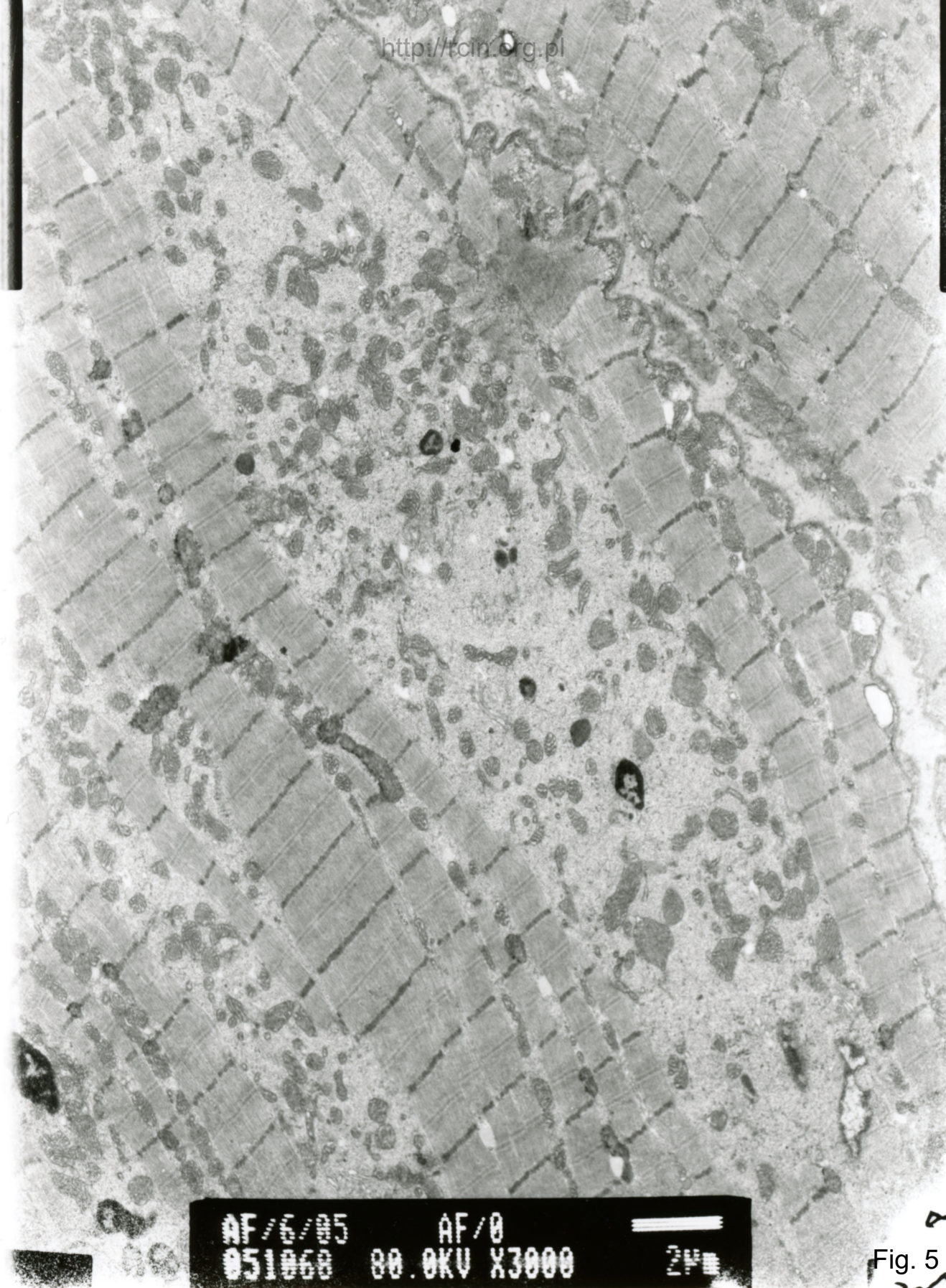
AF6/055 (3)BG LI
051011 00 AKU X6000

Fig. 3



AFSCFCE 6/05 SKA
052249 8A BKU X10K 500

Fig. 4



AF/6/05
051068

AF/0
80.0KV X3000

2µm

Fig. 5



AF6/055 (3)BG LI
051017 00 AKU X3000

Fig. 6



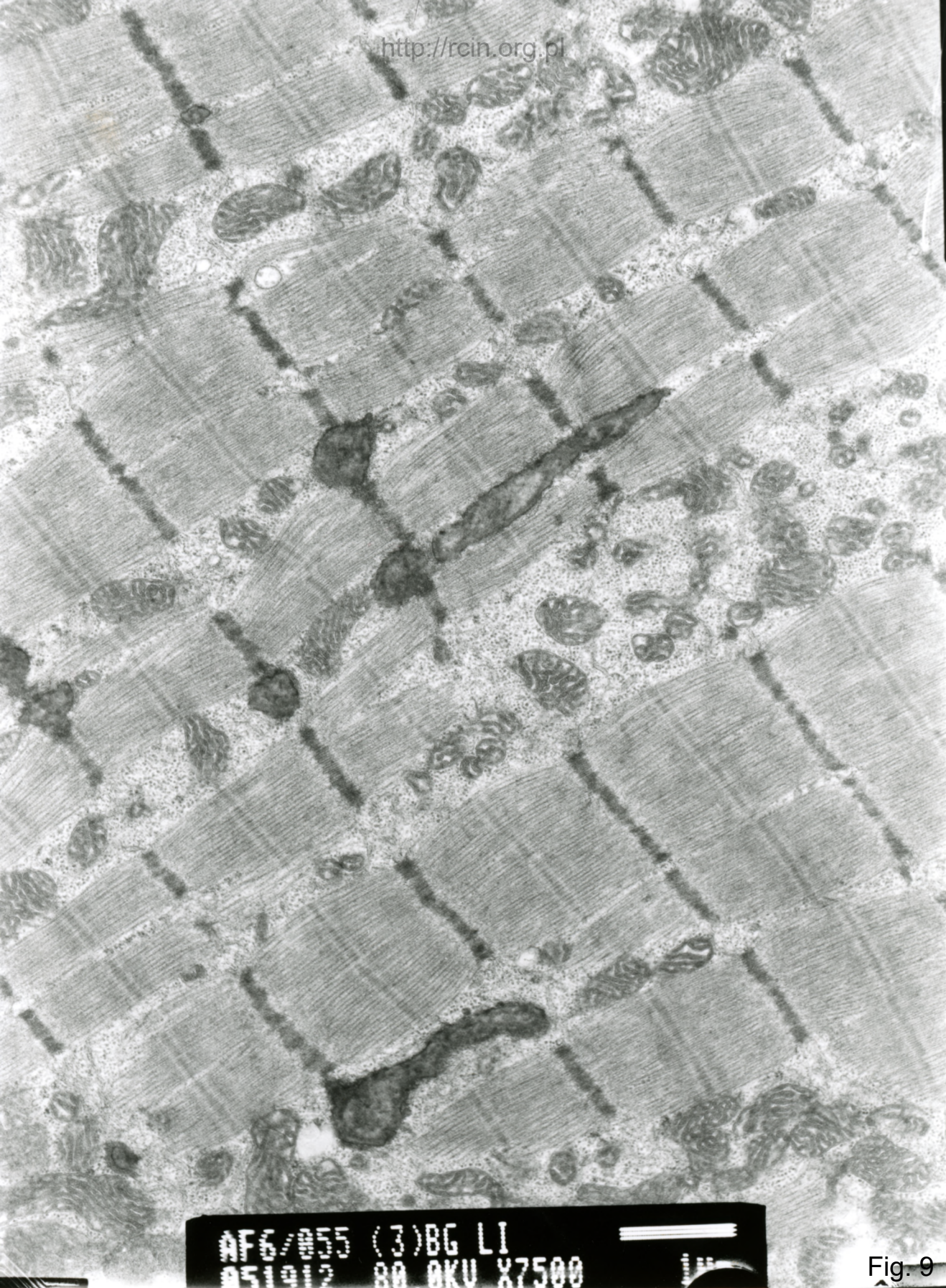
AFG/855 (3)BG LI
#51200 80 AKU X3000

Fig. 7



AF/6/85 AF/8
951952 00 AKH X4000

Fig. 8



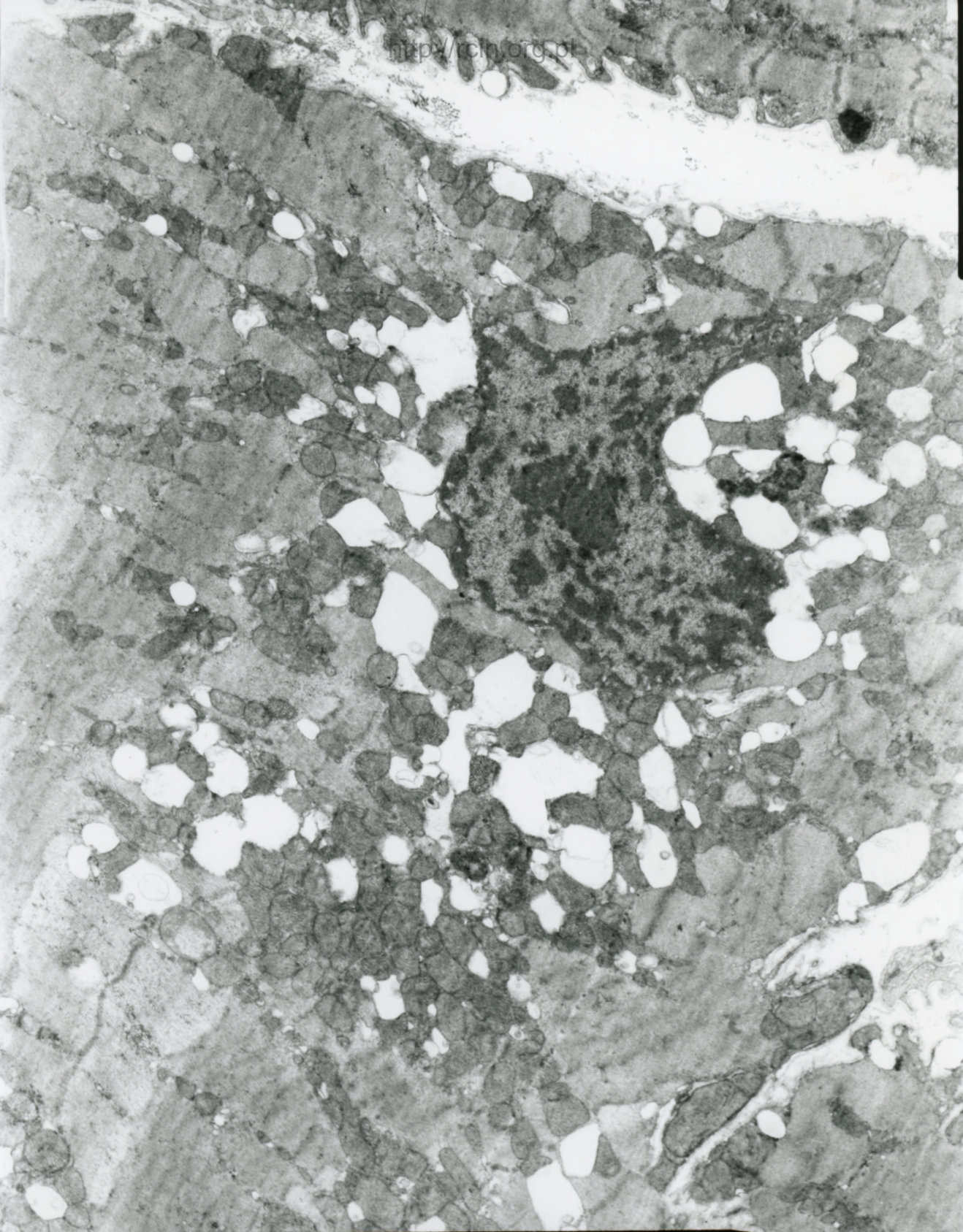
AF6/855 (3)BG LI
051912 80 OKV X7500

Fig. 9



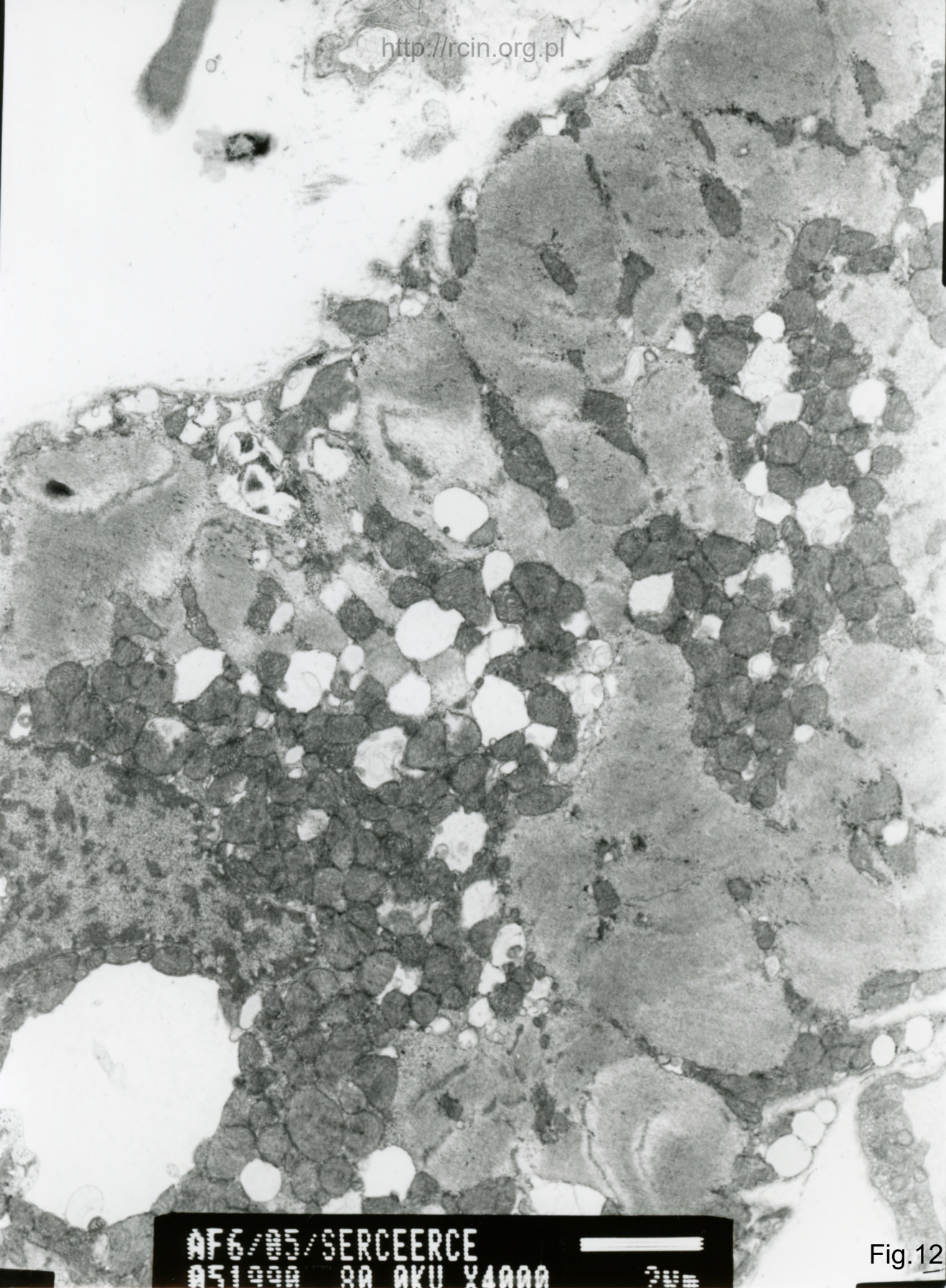
AF6/055 (3)BG LI
22 000 45000

Fig.10



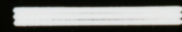
AF6/95/SERCEERCE
05/000 80 AKU X3000

Fig.11



ATG/05/SERCEERCE

051000 00 AKU Y4000



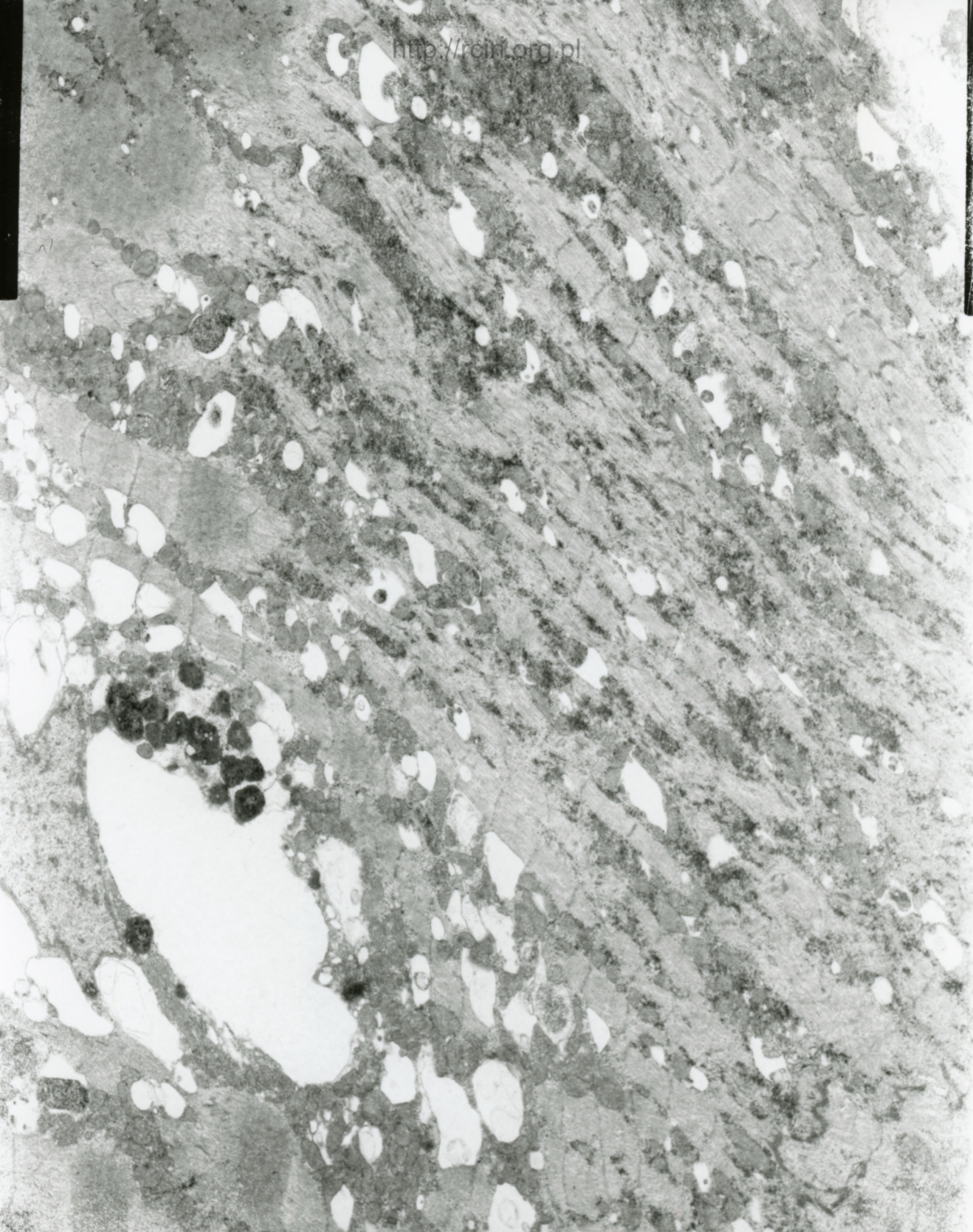
20µ

Fig. 12



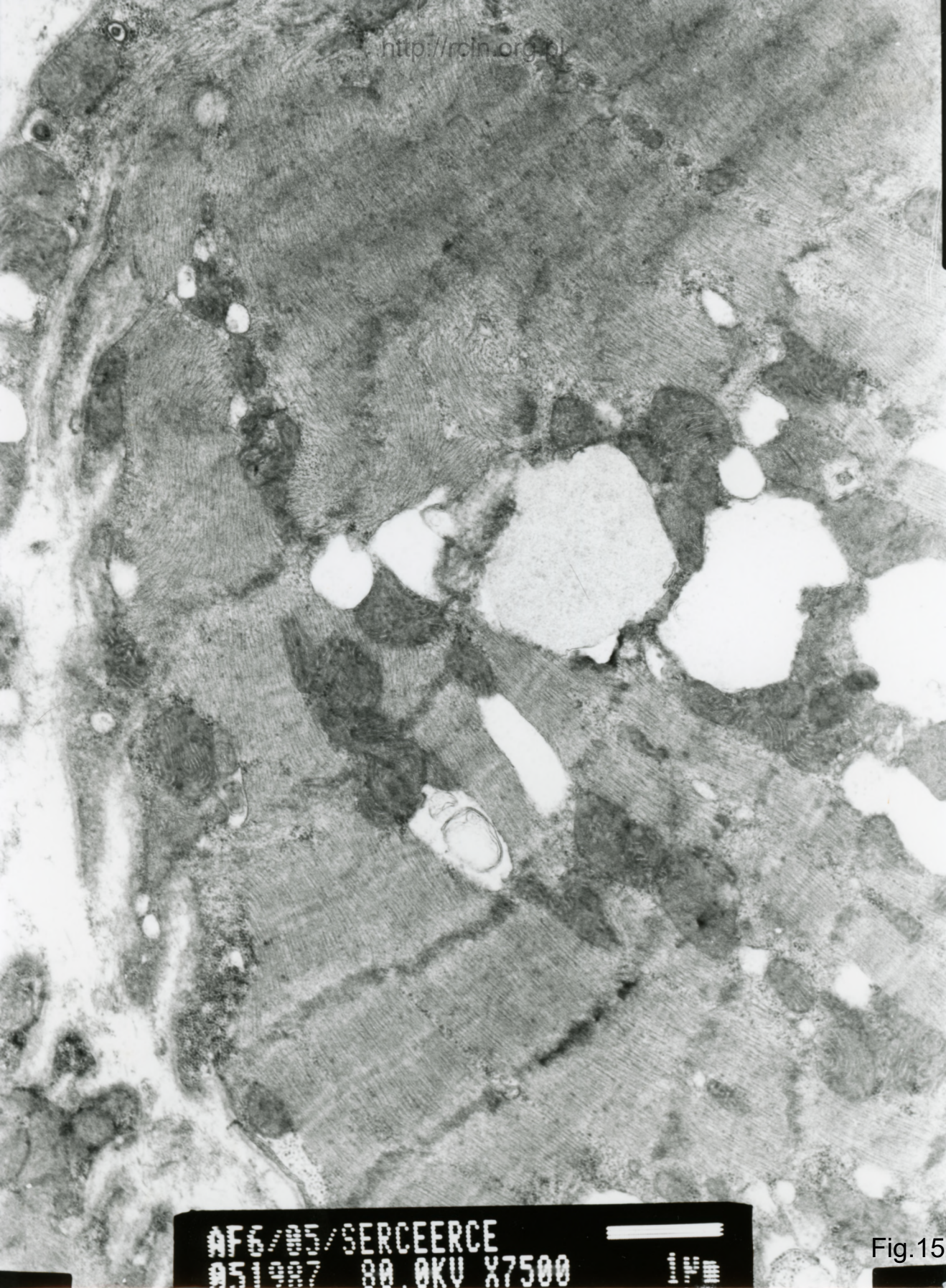
AF/6/05 AF/0
1997 00 000 X6000

Fig.13



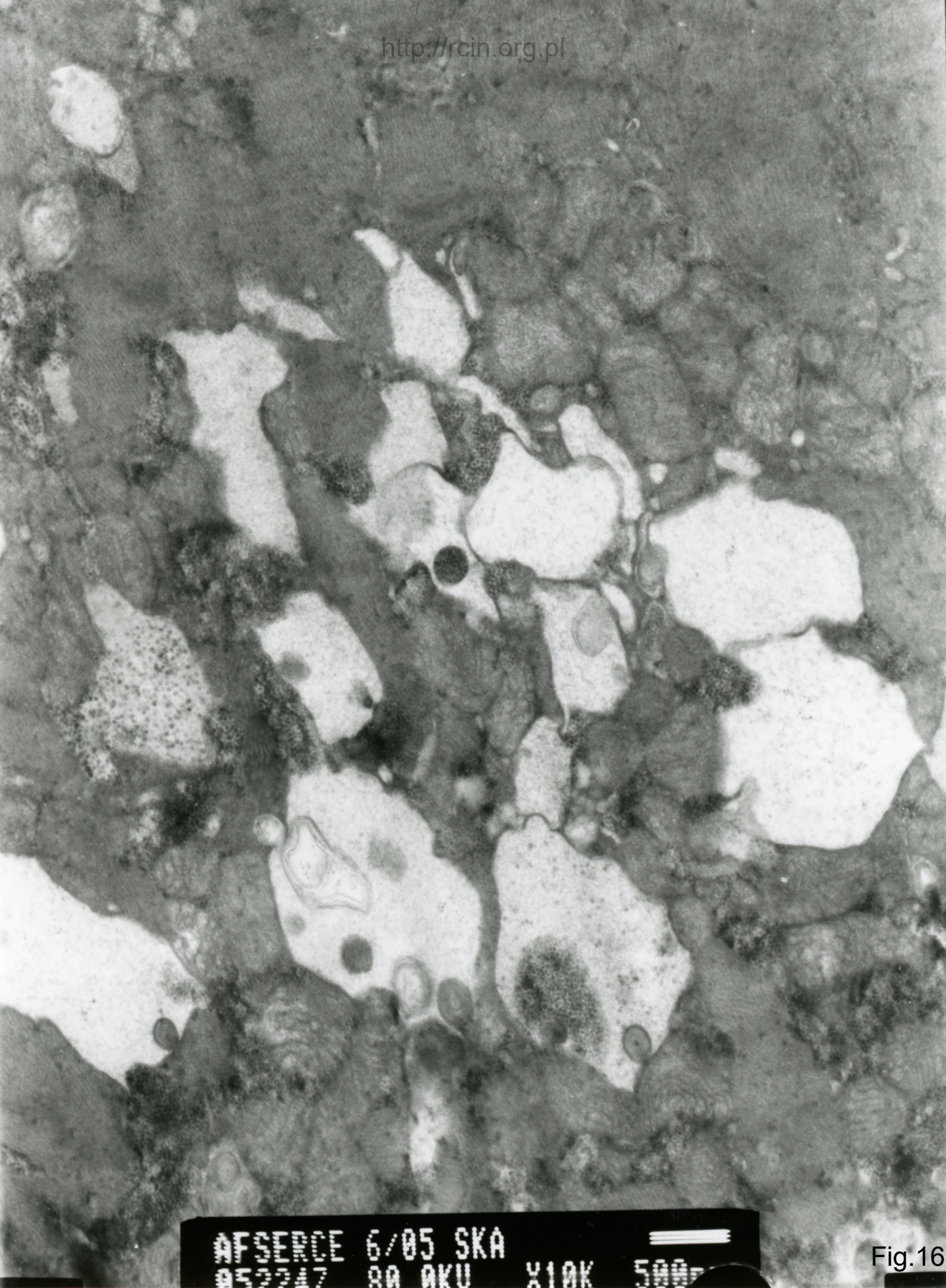
AF/6/05 AF/0
80.0KV X2500 2V

Fig.14



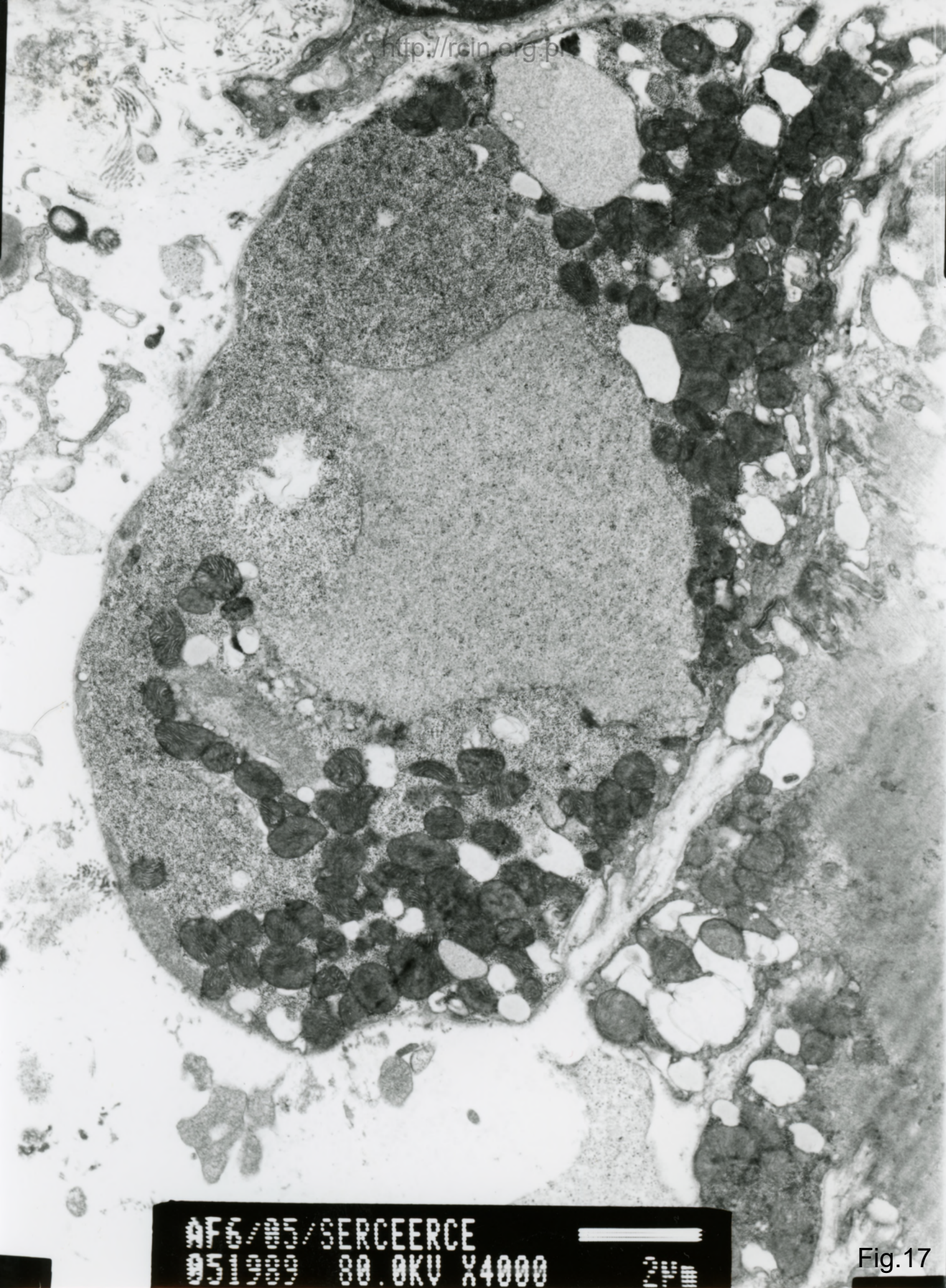
AF6/85/SERCEERCE
05/1987 80.0KV X7500

Fig.15



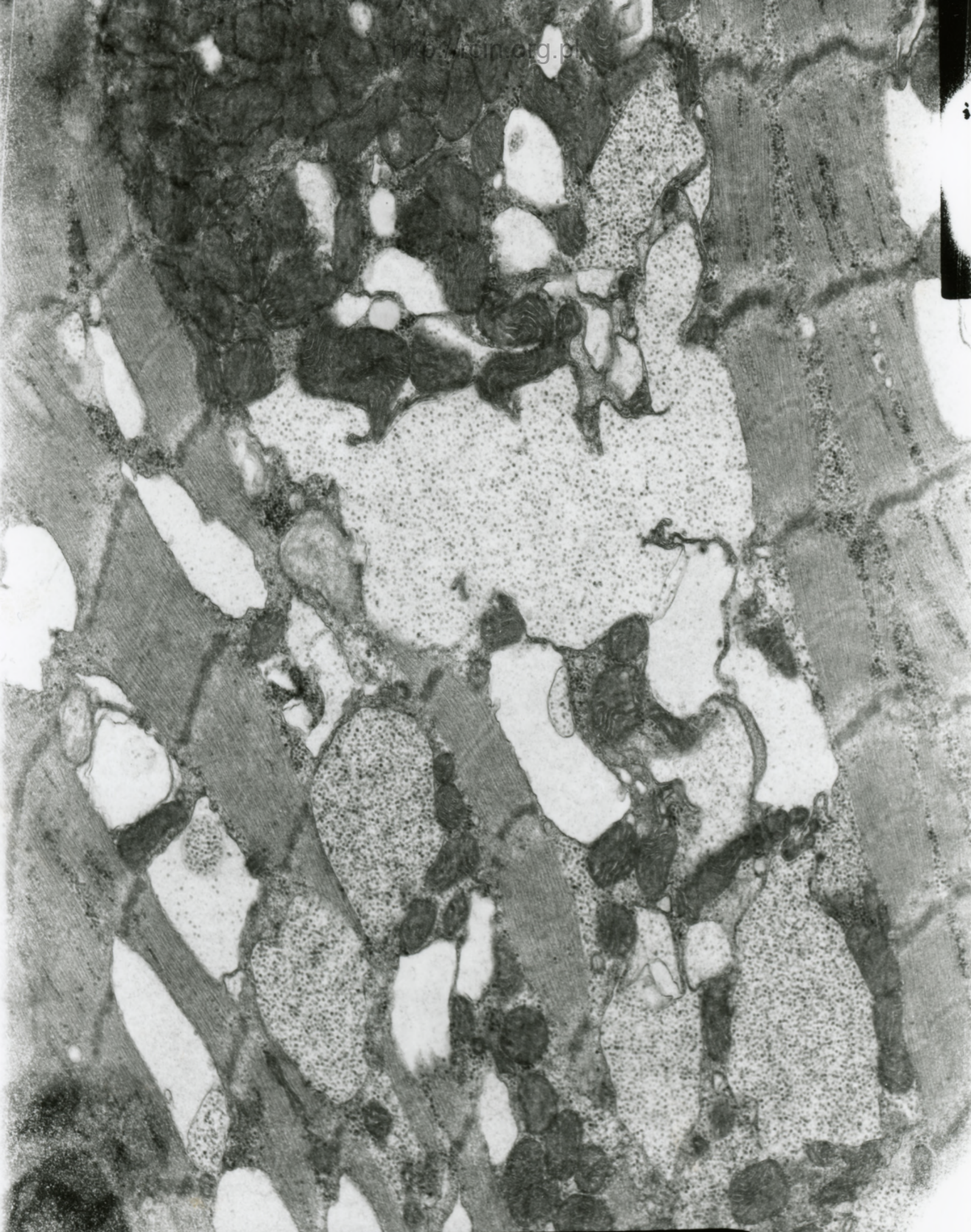
AFSERCE 6/05 SKA
052247 80 AKU X10K 500

Fig.16



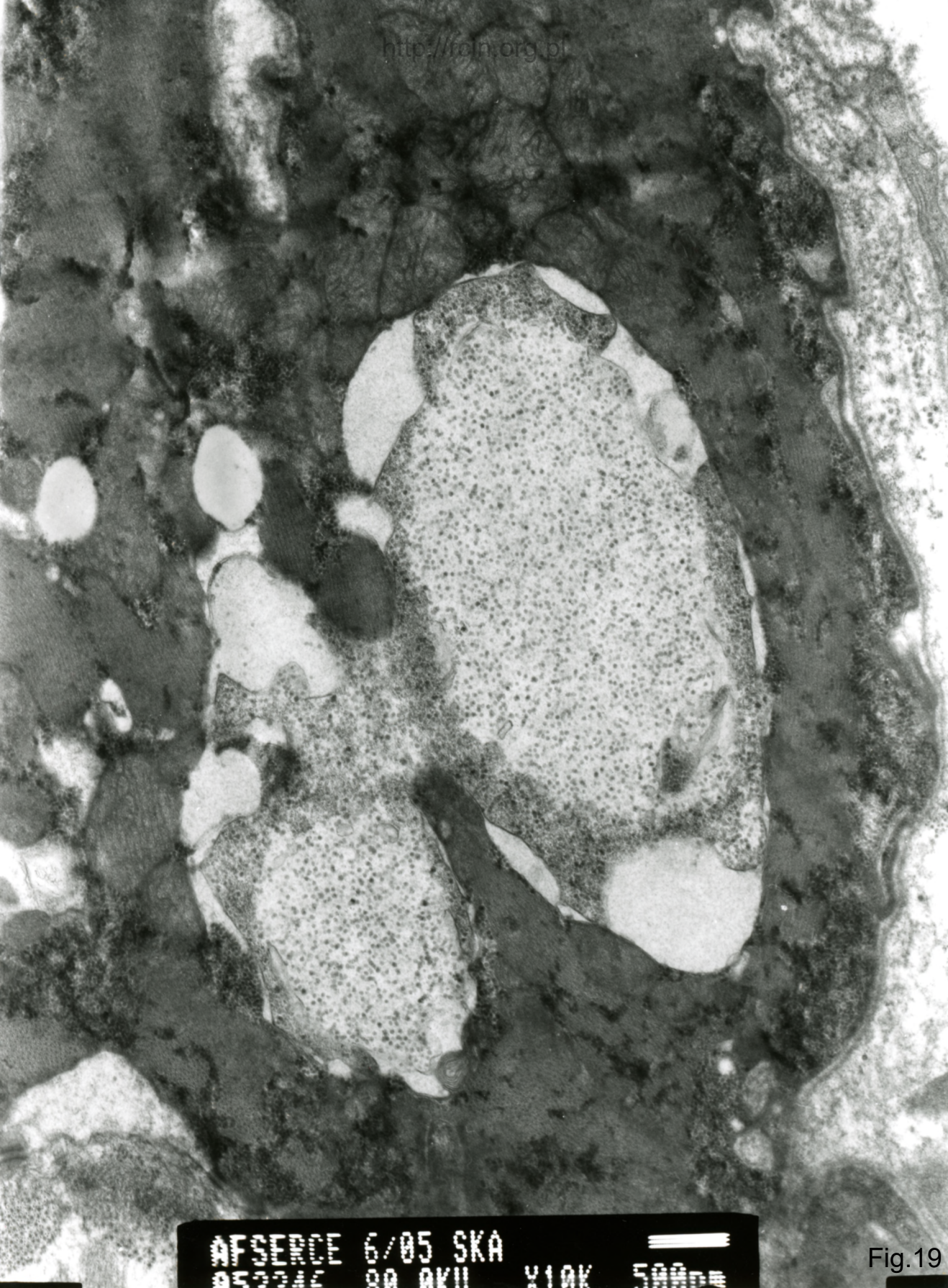
076/05/SERCEERCE
05/000 80.0KV X4000

Fig. 17



AF/6/05 AF/0
051063 80 0KV X7500 1/5

Fig. 18



AFSERCE 6/05 SKA
052246 00 0K11 Y10K 500nm

Fig.19

6/05 serce

1. 30

Rozpoznanie ?

Ocena ultrastrukturalna ujawniła zatartą strukturę sarkomerów, a także silną dezorganizację i rozproszenie miofibryli (Fig.1-4). Miejscowo obserwowano zupełny zanik miofibryli oraz obecność lipofuscyny (Fig. 5,6). Widoczne były elektronowo ciemne mitochondria o zmienionych grzebieniach (Fig.7-10). Analiza wykazała obecność w biopsacie wakuoli o różnej wielkości (Fig.11-15) w tym wakuoli autofagalnych (Fig. 16). W sarkoplazmie dość obficie występowały ziarna glikogenu, również w postaci obłonionej (Fig.17-19).

Rozpoznanie ?

Ultrastructural analysis revealed blurred sarcomere pattern as well as disorganization and dispersion of myofibrils (Figs.1-4). Focally complete atrophy of myofibrils were seen and lipofuscin deposits were observed (Figs. 5,6). Changes within the mitochondria were noticed- they were dark and characterized by an abnormal course of cristae (Figs.7-10). Electronmicroscopy analysis showed the presence of various sizes vacuoles in the biopsy (Figs.11-15) including autophagous vacuoles (Fig. 16). In the sarcoplasm quite abundant glycogen granules , some of them in membrane-surrounded clusters were seen (Fig.17-19).