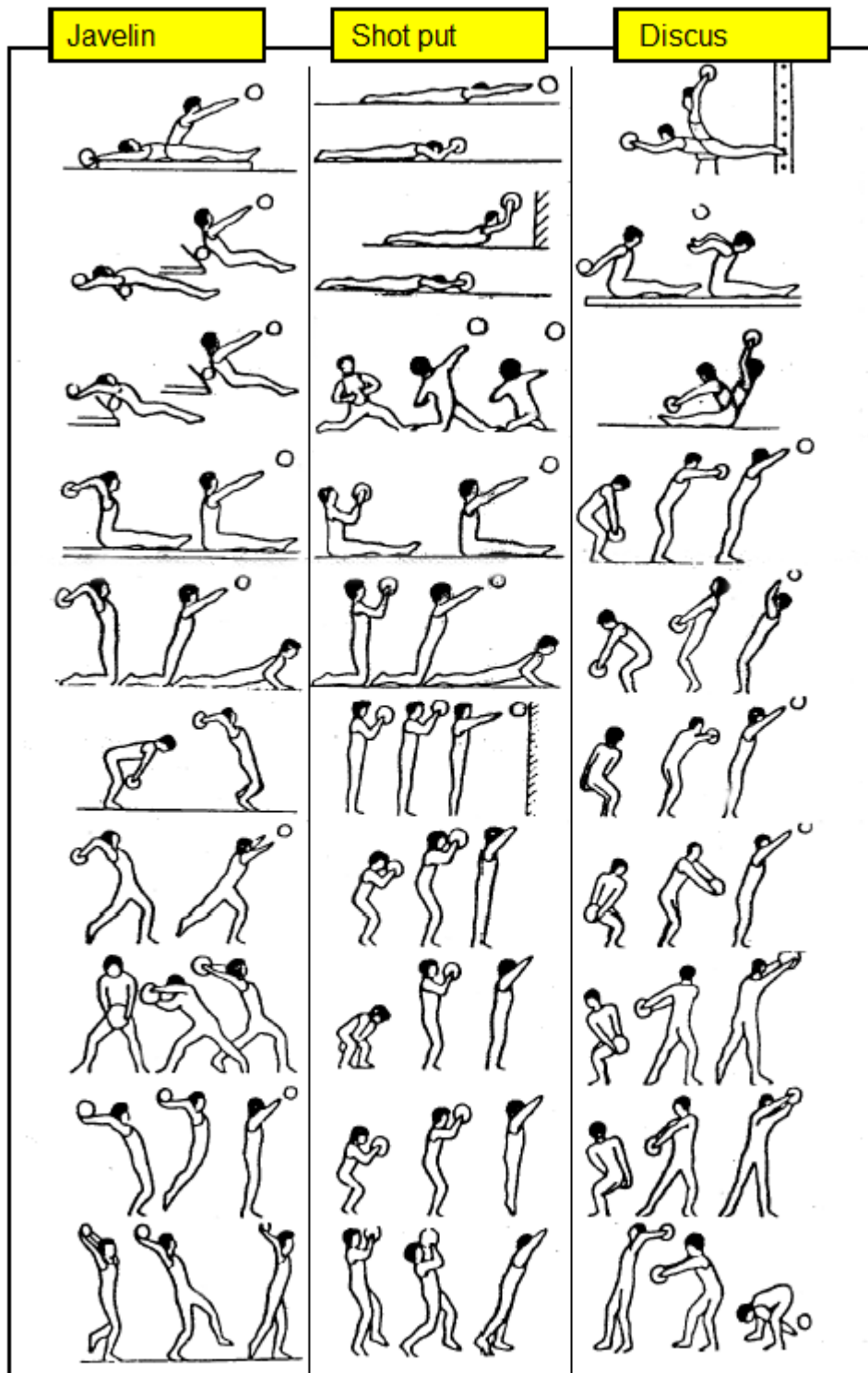


Lothar Altmeyer: Clinic notes

Weight training for throwers

a) General conditioning



b) Circuit training exercises



c) Weight lifting exercises

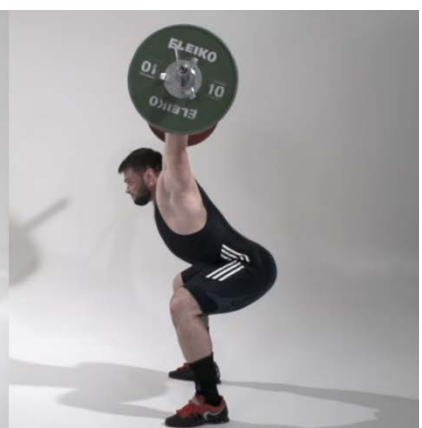
Main exercises for shot put and discus: The big five

- a) The snatch and its variations
- b) The clean and its variations
- c) The neck jerk
- d) The squat
- e) The bench press

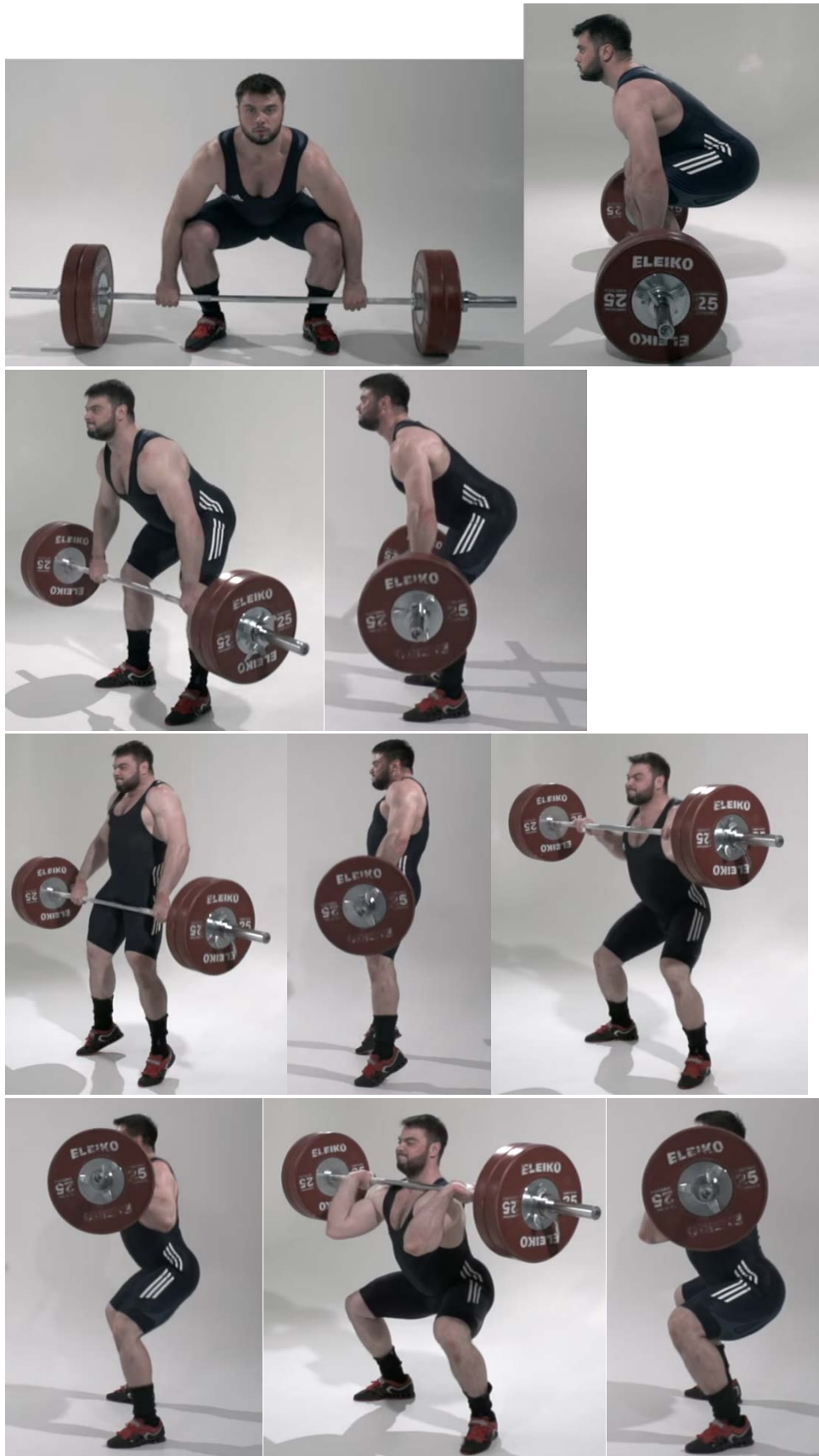
- **Snatch/Clean variations: The hang power snatch/clean**
- **Hang Positions**
- High-Hang: Upper thigh
- Mid-hang: Mid-thigh
- Hang: Top of knee caps
- Knee: Bar at knee caps
- Below knee: Bar just below knees

<u>Assistance exercises I</u>	<u>Assistance exercises II</u>
<ul style="list-style-type: none"> • Pulling movements • Deadlift • Calf raises • Leg curls • Leg press 	<ul style="list-style-type: none"> • Incline bench press • Shoulder press with barbell or dumbbell • Biceps curls • Forearm exercises • Lat pulling exercises • Abdominal exercises • Lower back exercises

a) The power snatch



b) The power clean



Specific exercises discus

- Dumbbell fly
- Throwing heavy implements (rubber or iron balls, metal bars, handle medicine balls, handle rubber sandbags)
- Plate imitations

Specific exercises shot

- Imitations with dumbbell
- 45 degree jerk exercise
- Throwing heavy implements

Periodization

Each phase should last for about 4 to 6 weeks

- General preparation: circuit training 20/40sec. then 30/30sec.
- Hypertrophy phase: 8-12 reps, 3-5 sets, 1-3 min. rest, 60-75% 1RM
- Maximum strength training: 5-8 reps (3-5)*, 4-6 sets, 3-4 min. rest, 75-85% 1RM
- Intramuscular coordination: 1-5 reps (1-3)*, 4-6 sets, 4-6 min. rest, 85-100% 1RM

*= weightlifting exercises